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EDITORIAL

Dr. Henry E. Sigerist will celebrate his sixty-fifth birthday on April 7, 1956. To many men this is a milestone signifying retirement from their official duties. But it has no such meaning for Dr. Sigerist. In 1947 he left The Johns Hopkins University, where he had been William H. Welch Professor of the History of Medicine and Director of the Institute of the History of Medicine, and together with Mrs. Sigerist took up residence in Pura, Switzerland. Having thus freed himself from administrative and teaching duties, though maintaining an academic affiliation with Yale University, Dr. Sigerist devoted himself to his main project, the writing of a comprehensive History of Medicine. Of this work, 1951 saw the appearance of the volume covering primitive and prehistoric medicine as well as the medicine of ancient Egypt and Mesopotamia.

Dr. Sigerist is an Honorary Member and former President of the American Association of the History of Medicine which, in 1950, made him the first recipient of its William H. Welch Medal awarded " for particular contributions of outstanding scholarly merit in the field of medical history."

In 1933 Dr. Sigerist founded the *Bulletin,* which he edited until 1947. On the occasion of his sixty-fifth birthday the *Bulletin* extends to its founder best wishes for improved health and for satisfaction in his historical work.

OWSEI TEMKIN

HANDWASHING AND THE EYESIGHT IN THE *REGIMEN SANITATIS*

RAPHAEL LOEWE

The investigation of the origin of the medical school at Salerno has attracted considerable attention in recent years from historians of medicine,[1] by whom the legend of its foundation by four masters [2]—a Latin, a Greek, a Jew, and a Saracen—is regarded as not literally, and at most poetically true.[3] As far as concerns a possible Jewish share in its origins, it is to be noted that there had been a Jewish community of some size in Salerno from the year 872 onwards, and that it had included a physician named Judah some time before the year 1000;[4] the Jewish traveller Benjamin of Tudela, who visited Salerno shortly before 1173 and found there a Jewish quarter comprising some 600 persons,[5] states explicitly that "*the Christians* have there a school of medicine." It has been pointed out[6]

[1] A Selected Bibliography was given by C. and D. Singer in 1924 in "The Origin of the Medical School of Salerno," published in *Essays on the History of Medicine Presented to Karl Sudhoff*, ed. C. Singer and Henry E. Sigerist, p. 136 f. It may be supplemented by the following items; C. and D. Singer, "The School of Salerno," *History*, new series, vol. x (1925-26), p. 242 f. C. Singer, *From Magic to Science* (1928), p. 240 f. P. O. Kristeller, "The School of Salerno" in the *Bulletin of the History of Medicine*, vol. 17 (1945), p. 138 f. The most recent study is that of H. P. Bayon, "The Masters of Salerno and the Origins of Professional Medical Practice," in *Science, Medicine and History: Essays in Honour of Charles Singer* (1954), ed. E. A. Underwood, vol. 1, p. 203. Lufti M. Sa'di, "Reflection of Arabian Medicine at Salerno and Montpellier," in *Annals of Medical History*, new series, vol. 5 (1933), p. 215 f. Of germane though not immediate concern is Cecil Roth's recent article, "The qualifications of Jewish Physicians in the Middle Ages," *Speculum*, vol. 28, no. 4 (1953), p. 834 f.

[2] For the source, see S. de Renzi, *Collectio Salernitana*, vol. I (1852), p. 106, quoting the MS Chronica Salerni of Elinus the Jew. Also his *Storia documentata della scuola medica di Salerno* (1857), p. 121.

[3] Bayon (*op. cit.*, p. 209) dismisses it. But C. Singer has frequently emphasised the fact that the legend does in point of fact accurately reflect the fourfold influence operative in Southern Italy at the period in question.

[4] See C. Roth, *The History of the Jews of Italy* (1946), p. 62; de Renzi, *Storia documentata*, p. 162.

[5] See M. N. Adler. *The Itinerary of Benjamin of Tudela* (1907), p. 10 of the Hebrew section and p. 9 of the English; Roth, *op. cit.*, p. 79. The negative implications of this as regards any Jewish participation—at least at that date—seem insufficiently appreciated (cf. p. 62).

[6] C. and D. Singer, *Essays . . . Presented to Karl Sudhoff*, p. 133 f.; *History*, n. s., vol. 10 (1925), p. 243; C. Singer, *From Magic to Science*, p. 241 f.

that the cosmopolitan training of the Jewish physician Donnolo,[7] or Shabbethai ben Abraham ben Joel, who was born at Oria in 913 and died after 982, could in some sense justify a claim on his behalf to have been the synthetic archetype of the four masters in the legend; but as Bayon has objected,[8] there is no evidence positively connecting Donnolo with Salerno. While questioning[9] the general conclusion since de Renzi, recently endorsed by D. Guthrie,[10] that Salernitan medicine shows no trace of Arabian influence, Bayon himself suggests[11] that the following features point toward Hebrew sources. (1) References to the Bible in the Salernitan MSS are to the Old Testament and the Apocrypha only, not to the New Testament. (2) The absence of references to astrology either implies a lack of knowledge of it, or may be due to the possible suppression of such matter by Jewish translators, since astrology was condemned by Maimonides.[12] This last argument, at least, seems tenuous, in view of the importance accorded to astrology—in most cases without misgivings—in Talmudic and post-Talmudic literature, and the reputation enjoyed by many Jews (including Donnolo himself) as expert astrologers;[13] Maimonides' own dates are 1135-1204. Nevertheless, it is possible that a close investigation may bring to light more positive evidence for the use, directly or indirectly, of Jewish sources in the Salernitan MSS: and the burden of this note is to draw attention to one such instance in the *Regimen Sanitatis*.

Although the exordial dedication of the *Regimen Sanitatis, Anglorum regi scribit schola tota Salerni*, has been thought by some to refer to Robert Curthose, Duke of Normandy and son of William I, who was once cured of a wound at Salerno, Sudhoff[14] has shown that there is no trace of its existence before the middle of the 13th century: it had no definite form from the beginning, being based upon a floating mass of memorial verses,

[7] See R. Gottheil in the *Jewish Encyclopedia*, vol. 4, p. 639, including a bibliography; also, with further references, U. Cassuto in the (German) *Encyclopaedia Judaica*, vol. 5, c. 1192.

[8] *Op. cit.*, p. 207.

[9] *Ibid.*, p. 217.

[10] *A History of Medicine* (1945), p. 103.

[11] *Op. cit.*, p. 218.

[12] *Guide for the Perplexed*, translated by M. Friedländer (2nd edition, 1904), p. 333 (Part 3, § 37).

[13] See Gottheil's article and bibliography in the *Jewish Encyclopedia*, vol. 2, p. 241.

[14] *Archiv für Geschichte der Medizin*, vol. 7 (1914), p. 360, vol 8 (1915), p. 355 f., vol. 12 (1920), p. 160, 166 f. Kristeller, *op. cit.*, p. 169 f. Cf. Singer, *History*, new series, vol. 10 (1925), p. 245 f.

the most extensive collection of which is that assembled by de Renzi.[15] Arnold of Villanova, who is recorded to have prepared a health manual for Boniface VIII in 1301,[16] wrote a commentary in the early 14th century on a nucleus of verses. Sudhoff [17] was inclined to think that Arnold was himself responsible for the collection and for its attribution to the school of Salerno, a conclusion most recently endorsed by Bayon,[18] although Kristeller [19] had considered it equally possible that a nucleus of verses upon which Arnold commented was indeed composed at Salerno during the latter half of the 13th century. The evidence which I here produce does not contradict such a dating, but it does give us a substantially earlier *terminus a quo*.

A passage in that portion of the Regimen Sanitatis which deals with *handwashing* [20] asserts that a post-prandial wash will confer the dual advantage of clean hands and keen eyesight:

> Si fore uis sanus ablue sepe manus
> Lotio post mensam tibi confert munera bina
> Mundificat palmas et lumina reddit acuta.

This advice is reproduced in some of the vernacular versions of the *Regimen*. An English translation by Thomas Peynell, which appeared in 1530,[21] renders it:

> If thou wilt walk in health, let mee aduise
> Oft wash thine hands, chiefly when thou dost rise
> From feeding at the Table: for thereby
> Thou gainst two benefits. It cleares the eye,
> Gives comfort to the Palmes, both which well tended
> Our health (thereby) the better is befrended.

In *The Englishman's Doctor*, which appeared in 1608,[22] Sir John Harington expressed it more succintly:

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[15] S. de Renzi, *Collectio Salernitana*, 5 volumes, Naples, 1852-59; *Storia documentata*.

[16] Bayon, *op. cit.*, p. 213, citing Sudhoff, *Archiv für Geschichte der Medizin*, vol. 12 (1920), p. 167.

[17] See Kristeller, *op. cit.*, p. 169 f.

[18] *Op. cit.*, p. 219.

[19] *Op. cit.*, p. 169.

[20] Chap. 23: ed. Louvain, 1480 (?), by J. de Westphalia, sig e 4 4r, de Renzi, *Collectio Salernitana*, vol. 1, p. 449, l. 125 f.

[21] In the 1528 edition the commentary of Arnold of Villanova only is in English: the rendering quoted is found in some subsequent editions, e. g. 1649, p. 69.

[22] The passage here quoted is reprinted in Alexander Croke's edition of the *Regimen Sanitatis* (Oxford, 1830), p. 105, l. 65.

Of washing of your hands much good doth ryse,
'Tis wholesome, cleanly, and releeves your eyes.

The use of the word *relieves* as against the more positive *clears* (= *reddit acuta*) should perhaps be noted in view of what is stated below concerning the probable source for this portion of the *Regimen*. By contrast, the following German rendering [23] preserves the positive notion:

Wasch dein händ/underlass es nicht/
Du reinigst dich/und scherrpffst dein gsicht.

Likewise the Italian: [24]

Se gli umor serbar vuvi sani
Lava spesso le tue mani.
Recar suol dopo le cene
Tal lavacro un doppio bene:
Alle mantoglie l'untume,
E degli occhi aguzza il lume.

The commentary of Arnold of Villanova on the original text reads thus: [25]

Id est prodest oculis et hoc maxime per accidens:
quia manus sunt instrumenta mundandi oculos.

This explanation, although clearly *ex post facto*, does give us a pointer to the origin of the juxtaposition in the *Regimen Sanitatis* of handwashing and the eyesight. The custom of washing after a meal was doubtless widespread in the ancient world and during the mediaeval period, since knives, forks, and spoons were not commonly in use as eating implements. In polite English society it survived, in an attenuated form, up to the first World War and even later; "finger-bowls" would appear on the table with the dessert. It is likewise an institution of Islamic society.[26] According to Jewish law, the washing of the hands both before and after meals is, or at any rate has in the past been customary; and the importance of the post-prandial wash is stressed in the statement [27] that whereas to wash before eating is a mandatory act involving a benediction (*mitzwāh*), and to do so after eating is also mandatory, but of a different quality

[23] Ed. Frankfurt, 1559 (also 1573, 1582), f. 95v.
[24] Ed. Magenta, Pavia, 1835, p. 12.
[25] Ed. Venice (*post* 1500), sig. h verso (i.e. [29v]).
[26] *Shorter Encyclopaedia of Islam*, ed. H. A. R. Gibb and J. H. Kramers (1953), article Ta'am, p. 556; 'Al-Ghazzali, *'Ihya 'ulum 'al-din, Rub' 'al-'adat*, II, chap I, § 3. (ed. Cairo, A. H. 1306, vol. 2, p. 5).
[27] Babylonian Talmud, *Ḥullīn*, 105a, *'Erūbhīn*, 17b.

(*ḥōbhāh*),[27a] any washing between courses is entirely a voluntary matter.[28] The Talmud advances a reason for the indispensability of the post-prandial wash, in the name of Rabbi Judah b. Ḥiyya, who lived in Palestine in the 3rd century C. E.[29] "It is because of a certain salt, from Sodom, which blinds the eyes."[30] This is elucidated by the commentary of Rashi *in loco*; it being a rabbinical institution to eat salt at the conclusion of the meal, contact of the fingers, when contaminated by salt, with the eyes must be prevented [such contact being likely, since the hands might be used to cover the eyes, in the interests of concentration, during the immediately following post-prandial grace].

We have a certain amount of information as to the history of this post-prandial wash as an institution observed by Jewry. Unlike the pre-prandial wash, it has today more or less completely disappeared in occidental communities. Where it is nevertheless found in the Ashkenazi Jewish world (i. e. Northern France, the teutonic and slavonic countries, and communities in Israel and America deriving from emigrants therefrom), it is to be regarded as a piece of pietistic revivalism on the part of the sect of *Hasidim*, who were doubtless influenced by the importance attached to the institution by the Cabbalists.[31] At all events, we know that in the 13th century it had already fallen into disuse in Northern France and Germany (and presumably England also, since the English Jews belonged to the same cultural orbit). Moses b. Jacob of Coucy (first half of the 13th century) in his legal digest *Sēpher Mitzwōth Gādhōl*, states explicitly that "nowadays we in France are not accustomed to observe the post-prandial wash, since the salt of Sodom is not found

[27a] See e. g. Abraham b. Isaac of Narbonne (d. 1179), *Sēpher Hā'eshkōl*, ed Albeck, vol. 1, p. 73. There is a divergence of authority among juridical authorities as to whether this wash is to be accompanied by a benediction or not, but most rule against it.

[28] *Ḥullin, loc. cit.*: אמר רב אידי בר אבין אמר רב יצחק בר אשיין מים ראשונים מצוה ואחרונים חובה מיתיבי מים ראשונים ואחרונים חובה אמצעיים רשות מצוה לגבי רשות חובה קרי לה. The authorities cited here, 'Idi bar 'Abin and Isaac bar 'Ashiyan, were Babylonians; 'Idi, who was the pupil of Isaac, lived *c.* 350 C.E. Cf. Tosefta, *Berākhōth*, V, § 13 (English Translation by A. Lukyn Williams (1921), p. 61), and Babylonian Talmud, *Yōmā*, 83b.

[29] So in *Ḥullin*, 105b; in *'Ērūbhin*, 17b, it is attributed to Rabbi Ḥiyya bar 'Ashi (Babylonian, late 3rd century C. E.).

[30] מפני מה אמרו מים אחרונים חובה שמלח סדומית יש שמסמא את העינים.

[31] See the commentary of Judah Ashkenazi of Titkin (*Bā'ēr Hēytēbh*) to *Shulḥān 'Ārūkh, 'Ōraḥ Ḥayyim*, § 181, x. Cf. Zōhar, Bālāḳ (Yānōḳā), ed. Mantua, vol. 3, f. 186b *supra* (English translation by H. Sperling and M. Simon, vol. 5, p. 255).

amongst us." [32] The *Tosaphoth* to *'Erubhin* (17d), which derive from Rabbi Simson b. Abraham of Sens [33] (c. 1150-c. 1230), say the same thing without specifying France,[34] and add "moreover, we are not [*sc.* any longer] accustomed to dip our fingers in salt at the end of the meal." Me'ir Haccohen, who lived in Germany in the late 13th century and wrote the *Haggāhōth Maimūniyyōth* on Maimonides' code *Mishneh Tōrāh*, states [35] that the post-prandial wash was obligatory only when the salt of Sodom was in use, but that in his own time it was held necessary only if the hands happened to be ill-smelling, in which case they must be washed before grace were said: "but," he continues, "one who is delicate [i. e. *fastidious*: איסתנים, a loan-word from *ἀσθένης*] and in the habit of washing after his meal must do so before he says grace." [35a]

On the other hand, in the Sephardic half of Jewry, *i. e.* Spain, Portugal, the Levant and Mediterranean seaboard generally, the institution seems to have survived longer; and it is no doubt due to an Islamic environment that it is maintained to some extent within this section of Jewry today. Thus, Maimonides (died 1204), in his code,[35] written in Egypt, stresses the importance of observing the institution because of the risks otherwise involved (מפני הסכנה). In the last legal code produced by Jewry, the *Shulḥān 'Arūkh*, which was composed by Joseph Caro, (born in the Iberian Peninsula, and died in Safed in 1575), the post-prandial wash is still included as a regular institution, but the author concedes that it is not universally observed.[36]

It will be observed that all these juridical commentators and codifiers, whether they regard the institution of the post-prandial wash as obsolete or not, are fully cognizant of the fact that, according to the Talmudic source (whether or not this is in fact the true starting point, or the explanation of a much older custom, being for present purposes immaterial), the insti-

[32] Positive Commands, § 27, ed. Soncino (1488), sig. נד 5r (*i. e.* [123r]) col. i. Cf. also *Bēth Yōseph* to *Ṭūr, 'Ōraḥ Ḥayyīm* § 181. Similarly Isaac b. Moses of Vienna (13th cent.), *Ōr Zārūa', Hilkhōth Neṭilāth Yādhayim*, § 72, ed. Zitomir (1862), vol. 1, p. 31.

[33] *The Jewish Encyclopedia*, article *Tosafot* (M. Seligsohn), vol. 12, p. 204, col. a.

[34] Similarly the *Tosaphoth* to *Ḥullīn* (105a), which derive from Rabbi Eliezer of Touques, in the second half of the 13th century.

[35] *Hilkhōth Berākhōth*, 6, § 2. Cf. also Eliezer b. Joel Hallēvī (d. c. 1235, Cologne). V. Aptowitzer, *Sēpher Rabiyyah*, I, 1, p. 134. (Also his § 1109, which is not at present available to me).

[35a] Cf. *Tosaphoth* to *Berākhōth* 53b, and the *Tosaphoth* of R. Judah Sire Leon of Paris (d. 1244) *in loc.* (*Berākhah Meshullesheth*, ed. H. Rothenburg, Breslau 1928, f. 41b).

[36] *'Ōraḥ Ḥayyīm*, § 181, x.

tution is intended purely as a *precautionary* measure against the peculiarly powerful effects of the salt of Sodom. If, as it is here contended, it is this same Talmudic source that underlies the passage under discussion from the *Regimen Sanitatis*, it remains to be shown how a measure that was explicitly cautionary, and therefore negative, has come to be credited with the power of actually *improving* the eyesight (*lumina reddit acuta*). The change can, I fancy, be accounted for by the assumption that it has been mediated by a Latin writer who was himself dependent directly upon the Talmudic material, *viz.* Peter Alphonsi.

Alphonsi,[37] *alias* Moses Sephardi, was a converted Jew who originated, as his surname implies, from Spain; he was born at Huesca in 1062 and died in (or after) 1110, and owed his baptismal name to the fact that Alphonso I of Aragon, whose body-physician he was, stood sponsor for him at the font on St. Peter's Day, 1106. Alphonsi came to England and received a similar appointment from Henry I. His literary activity is of significance for the history of astronomy, theological disputation—his *Dialogues of Moses and Peter*, which include post-Biblical Jewish material were much drawn upon by later apologists and polemical writers—and folk-lore. He assembled a number of moralising tales derived from Arabian and other oriental sources under the title *Disciplina Clericalis*,[38] some of which were thus passed into the folk-lore of Europe.[39] Included therein is a section [40] in which a father gives his son some advice on manners to be observed at table by those of good breeding. The following admonition comes at the end of a paragraph, and forms something of a climax:

> Post prandium manus ablue, quia phisicum est et curiale; ob hoc enim multorum oculi deteriorantur, quoniam post prandia manibus non ablutis terguntur.

It may, I think, be assumed that this advice has been inspired by the Talmudic passage concerned with post-prandial washing which has been

[37] For Alphonsi's biography, see *The Jewish Encyclopedia* (G. A. Kohut), vol. 1, p. 377; Steinschneider, *Die Hebräischen Übersetzungen des Mittelalters* (1893), p. 933; J. Millas Vallicrosa, "La aportacion astronomica de Pedro Alfonso," in *Sefarad*, vol. 3 (1943), p. 65 f., and thence reprinted in his *Estudios sobre historia de la ciencia espagnola* (Barcelona, 1949), p. 19 f.

[38] Migne's *Patrologia Latina*, vol. 157, 671 f., reproducing Labouderie's text (1824). A critical edition was published by A. Hilka and W. Söderhjelm in *Acta Societatis Scientiarum Fennicae*, vol. 38 (Helsingfors, 1911), part 4.

[39] See C. and D. Singer in *The Legacy of Israel* (ed. E. R. Bevan and Charles Singer, 1927), p. 209; R. Loewe, "The Mediaeval Christian Hebraists of England," in the *Transactions of the Jewish Historical Society of England*, vol. 17 (1953), p. 230 f.

[40] Ed. Hilka-Söderhjelm, p. 37; *P. L.*, vol. 157, 700b.

discussed above; Peter Alphonsi will no doubt have been familiar with the custom from his father's board, and, as we know from his other writings, he was well read in rabbinic lore and literature. In this connection it may be noted that in the immediately following passage, which deals with the manner of accepting an invitation, Alphonsi professedly adduces Jewish material (*fac sicut auctoritas Iudaeorum praecipit*) when he cites the rabbinic exegesis of the varying responses given by the angels to the invitations of Abraham and Lot respectively (*Genesis*, xviii, 5 and xix, 2).[41] In any case, the choice of the word *terguntur*[42] surely implies that Alphonsi realised that the danger, the cause of which he is not here concerned to mention explicitly, would be due to salt-besmirched hands being placed over the eyes during the post-prandial grace.

Alphonsi's failure to mention the danger from the salt is doubtless the excuse—scarcely a reason—for the fact that popular usage in Christendom, ignorant of Jewish social history and the Talmudic discussion underlying Alphonsi's recommendation, credited the prescription (which he had intended merely as a prophylactic) with a positive, tonic value. The time interval of about a century between Peter Alphonsi and the supposed beginnings of the *Regimen Sanitatis* seems sufficient to allow of this having happened, but the process was doubtless facilitated by the circumstances that alongside the reading *curiale* (*courtly, polite*) in the passage cited above there is also attested an inferior reading *curabile*,[43] as printed in Labouderie's text and thence reproduced in Migne's *Patrologia Latina*. It is noteworthy that in the mediaeval French version,[44] the phrase used in the Latin (itself probably translated by Alphonsi from his own Hebrew or Arabic original),[45] *quia phisicum est et curiale*, is represented by the words *car ch'est saine cose* only. Conversely, the

[41] Babylonian Talmud, *Bābā' Metzīāh*, 86b-87a; parallel in *Genesis Rabbah*, 50, § 2 on *Genesis*, xix, 5, ed. J. Theodor and Ch. Albeck, p. 520. It is just conceivable that the juxtaposition of this piece of midrashic folk-lore and of the foregoing matter concerning handwashing and the eyesight has been prompted by the reference to washing (albeit of *feet*), in the biblical *text*—Gen. xviii, 4 and xix, 2. Cf. the remark in *Genesis Rabbah* immediately preceding the passage referred to.

[42] The reading *tanguntur* of 6 MSS is rejected by the editors of the critical text.

[43] So MSS Breslau, Royal and University Library I. F. 86, and I. F. 180 (both *saec.* xiv), and Cambridge University Library Ii vi II (*saec.* xiii).

[44] Printed by Hilka and Söderhjelm in the same series, 38, part 5 (1912); see p. 31.

[45] See R. Loewe, *op. cit.* (n. 39), p. 231, where I argued that Alphonsi's use of *adiungere* in the sense of *compose* [*sc.* poetry] reflects the idiomatic use of חִבֵּר (= join) in Hebrew, but not in Arabic. However, *adjungere* might also reflect the literal sense of the Arabic *'allafa* which in general means to *compose*.

Regimen Sanitatis may be used as evidence for the prevalence of the corruption *curabile* in the text of Alphonsi's *Disciplina Clercialis* already in the early 13th century.[46]

It is desirable that a search should be made for further parallels between the *Regimen Sanitatis* and Peter Alphonsi's other works; as far as I know, there are no further passages of immediately obvious relevance in the *Disciplina Clericalis*, the full investigation of the sources of which remains, however, a matter deserving of thorough-going treatment.

[46] Dr. Ephraim Urbach of Jerusalem has pointed out to me that in his *Criticisms* of Maimonides, *loc. cit.* (see note 35), R. Abraham b David of Posquières (d. 1198) makes a distinction between the *ritual obligation* to wash after eating such foodstuffs as leave the hands soiled, and the *mandatory custom* to do so even though the hands be left unsoiled by food; the latter being recognized as a prophylactic, but described by him as "for reasons of health (or healing)" (*misshūm r'phū'āh*). A careless reading of the passage might give a false impression that the words chosen bore a positive sense and indicated a tonic effect; but there is no need to assume that they have had any influence on the *Regimen Sanitatis* or the text of Peter Alphonsi, especially since there is not (to my knowledge) any evidence for the translation of these *Criticisms* into Latin in the Middle Ages. For this, as well as for sundry other references incorporated above, I am grateful to Dr. Urbach.

EMPEDOCLES AND FREUD, HERACLITUS AND JUNG *

GARFIELD TOURNEY

In surveying the course of the history of ideas, it is interesting to find that many of the concepts which our own age often treats as unique, are merely a restatement, with certain refinements, of ideas expressed in periods dating back thousands of years. In the pre-Socratic philosophers of ancient Greece, one finds a wealth of scientific hypotheses as well as metaphysical formulations, which appear correlated, directly or indirectly, with the conceptualizations of current scientific and philosophic thought.[1] Atomism and evolution were postulated as interpretations of nature by several of these philosophers, although in an extremely crude fashion as compared with the complexities of modern physics and biology. The importance of mathematics in theoretical science, not without an element of mysticism, it is true, was also emphasized by the pre-Socratics. In this brief study, we shall examine certain correspondencies and correlations between several philosophical principles of the pre-Socratics, mainly Empedocles and Heraclitus, and the modern psychological theories of Freud and Jung.

Something more than an analagous relationship may exist in these correlations, for there is some evidence suggesting that the ideas of both Freud and Jung were influenced by these ancient Greeks, perhaps even directly. Seventeen years after the publication of *Beyond the Pleasure Principle,* in which Freud first promulgated the theory of the life and death instincts, he spoke of Empedocles as one of the grandest and most remarkable personages in the history of Greek civilization.[2] He further stated that the two fundamental dynamic principles of Empedocles, Love and Strife, are nominally and functionally the same as the two primal instincts postulated by psychoanalysis.[3] Freud at that time spoke of his discovery of Empedocles' theory as having occurred subsequently to the publication

* From the Lafayette Clinic, and Wayne University, College of Medicine, Detroit.

[1] (a) Cornford, F. M., "Greek Natural Philosophy and Modern Science," in *The Unwritten Philosophy and Other Essays,* Cambridge, University Press, 1950, pp. 81-94. (b) Schrödinger, E., *Nature and the Greeks,* Cambridge, University Press, 1954.

[2] Freud, Sigmund, "Analysis Terminable and Interminable" (1937), in *Collected Papers,* Vol. 5; London, Hogarth Press, 1950, p. 348.

[3] *Ibid.,* p. 349. Freud also compared this theory of the instincts with the philosophy of Schopenhauer. See Freud, Sigmund, *New Introductory Lectures on Psychoanalysis* (1932), London, Hogarth Press, 1933, p. 139.

of his book; however, he admitted that because of his wide reading early in life he could never be certain that what he thought a creation of his own mind might not have been the result of cryptomnesia.[4] We do know that Freud was an avid reader of Plato [5] and studied Aristotle,[6] and references to Empedocles are made by both of these philosophers. Empedocles was a contemporary of Sophocles, whom Freud had read,[7] but it is doubtful whether Empedocles had much influence on Sophocles as his spiritual affinities were rather with Epimenides, Pherecydes, Onomacritus, and Pythagoras.[8] Jung, in his broad scholarly studies, makes frequent mention of several pre-Socratic philosophers, particularly Empedocles, Pythagoras, and Heraclitus. In his psychological system he has directly incorporated a concept of Heraclitus, *enantiodromia,* to describe the emergence of the unconscious opposite in symbol and thought.[9]

Empedocles of Acragas in Sicily was in his prime around 450 B. C.[10] Although the character and opinions of Empedocles attracted considerable attention during his lifetime, little is known about his actual existence. Numerous legends and anecdotes, largely conflicting, refer to him; however these endow him with an air of mystery and magic which makes it even more difficult to evaluate his life. It is most probable that during his life he functioned as politician, scientist, physician, philosopher, religious teacher, and mystic.[11] Early in his life he played an important part in the political events of Sicily following the death of Theron, a tyrant at Acragas, and became a great democratic leader there, although we have no definite knowledge as to exactly what he did.[12] He was the first to postulate the existence of the four elements, *earth, air, fire, and water,* and his scientific studies led to a crude theory of evolution, a theory of sexual characteristics in plants, and the effluential theory of perception. Galen regarded him

[4] Freud, Sigmund, "Analysis Terminable and Interminable," p. 138.

[5] Jones, E., *The Life and Work of Sigmund Freud*, vol. 1, New York, Basic Books, 1953, p. 56.

[6] *Ibid.*, p. 37.

[7] Freud, Sigmund: *Interpretation of Dreams* (1900), *Standard Edition of the Complete Psychological Works,* vol. IV, London, Hogarth, 1953, pp. 261-264.

[8] Cornford, F. M., *Principium Sapientiae,* Cambridge, University Press, 1952, p. 123.

[9] Jung, C. G., *Psychological Types,* London, Routledge and Kegan Paul, 1923, pp. 541-542.

[10] Freeman, K., *Companion to The Pre-Socratic Philosophers,* Oxford, Basil Blackwell, 199, p. 172.

[11] Burnet, J., *Early Greek Philosophy,* London, Adams and Charles Black, 1930, pp. 197-203.

[12] Freeman disagrees with Burnet in this regard, and believes that the stories of his political activities are improbable. Freeman, *loc. cit.*, p. 174.

as the founder of the Italian school of medicine [13] which he placed on a level with the schools at Cos and Cnidos. The author of the Hippocratic work *On Ancient Medicine* [14] looked upon him with less favor. He criticized Empedocles, along with other philosophers, for teaching the need for the knowledge of the nature of man as a precondition for properly comprehending medicine, which that author thought necessary for attaining certain knowledge of man's nature and of the causes of his coming into being. The religious teachings of Empedocles are largely mystical, having been influenced by Orphism and Pythagoreanism. He accepted the theory of metapsychosis, and preached release from the "wheel of birth" by purity and abstinence, a doctrine that was to have considerable influence on Plato. He even claimed to be a god, stating: "I go about among you an immortal god, no mortal now, honoured among all as is meet, crowned with fillets and flowery garlands." [15]

With great imagination Empedocles gathered elements for his philosophy from every available source, from the cosmogonies of Homer and Hesiod, the rationalism of Parmenides, Orphic mysticism, poetic legend, the experiences of a physician, the observations of nature, and the vision of a seer and mystic. These sources were brought together for a unitary vision of the world, nature, and man, their mysteries and the cycle of birth and death.[16] Zeller [17] considered his philosophy a reconciliation between the permanence of Parmenides and the generation, decay, and motion of Heraclitus, in that he described the qualitatively unchanging, underived and imperishable elements as combining and re-combining to account for the experience of change. Burnet [18] thinks it more likely that he strove for a mediation between Eleaticism and the senses, for it is not easy to find any trace of Heraclitean doctrine in his writings. Here will be presented only those aspects of his philosophy that have some resemblance to particular teachings of Freud. I shall discuss the ideas of permanence in the static elements, the "four roots" of all things,[19] and the motivators or dynamic forces, Love and Strife (or Hate), which account for change, the coalescence and separation of the elements. It is these dynamic forces

[13] Burnet, *loc. cit.*, p. 200.
[14] Cornford, *loc. cit.*, p. 39.
[15] Fragment 112. The fragments of Empedocles quoted here are from the listing of Burnet, *loc. cit.*, pp. 204-226.
[16] Cornford, *loc. cit.*, pp. 121-122.
[17] Zeller, E., *Outlines of the History of Greek Philosophy*, London, Routledge and Kegan Paul, 1931, p. 55.
[18] Burnet, *loc. cit.*, p. 227.
[19] Fragment 6.

of Love and Strife [20] that bear such a similarity to Freud's own third and final theory of the instincts, which he first mentioned in *Beyond the Pleasure Principle*.

To Empedocles, the four elements, *air, earth, fire,* and *water,* are imperishable substances,[21] eternal and unchangeable,[22] uncreated and ultimate. They account for all the substances that we know; hence all matter might be divided until one comes to the elements. Nature is only a mixing and a separation of these elements. When mixed into the form of man, plant, or bird the process is designated as Becoming, and when the elements separate this is Death.[23] Nothing can come from nothing and nothing can be destroyed. The Eleatic demand is thus satisfied. To account for the processes of motion and change, he postulated the existence of two principles, to which he also gave the quality of substance; the first, Strife, separates the elements, and the second, Love, brings them together. They were classed with the four elements and like them, as underived and eternal. "For even as they (Strife and Love) were aforetime, so too they shall be; nor ever, methinks, will boundless time be emptied of that pair." [24]

Although his concepts are fundamentally cosmological, they were viewed by Empedocles from the biological point of view. He found in Love, personified as Aphrodite, the same impulses to union that characterized human bodies, that is the sexual impulses, to use the terminology of our culture. The human passion becomes a world force,

. . . I shall tell thee a twofold tale. At one time it grew together to be one only out of many, at another it parted asunder so as to be many instead of one;—Fire

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[20] Similar concepts are found in many philosophies and religious systems. Dualism was the most prominent feature of the ancient Persian religion, Zoroastrianism. According to this view, the world is divided into two opposing powers, representing good and evil. *Ahura Mazda*, the great Creator, and his legions of angels and archangels, oppose *Angra Mainyu* (later corrupted as *Ahriman*) with his evil spirits and demons. These two powers come together and account for the antithetical phenomena of life and death, Heaven and Hell. These beliefs had considerable influence on the Judeo-Christian concepts of God and Satan. It should be noted that dualism as such did not exist in the ancient Hebrew teachings. Satan originally belonged to the company of Yahweh, and only subsequently became God's adversary through pride, jealousy and envy. See Langton, E., *Essentials of Demonology, A Study of Jewish and Christian Doctrine, Its Origin and Development*, London, Epworth, 1949. In the Buddhist theology, destruction and vengeful passion are personified as the god *Mara*, and mercy, love and peace as *Kami*. In the Buddhist and Hindu iconographies, all superhuman beings and presences are ambivalent in this manner. See Zimmer, H., *Philosophies of India*, New York, Bollingen, 1951, pp. 143-145.

[21] Fragment 8.

[22] Fragment 12.

[23] Freeman, *loc. cit.*, pp. 181-182.

[24] Fragment 16.

and Water and Earth and the mighty height of Air; dread Strife, too, apart from these, of equal weight to each, and Love in their midst, equal in length and breadth. Her do thou contemplate with thy mind, nor sit with dazed eyes. It is she that is known as being implanted in the frame of mortals. It is she that makes them have thoughts of love and work the works of peace. They call her by the name of Joy and Aphrodite.[25]

There is union in Love and separation in Strife.

. . . all things that are more adapted for mixture are like to one another and united in love by Aphrodite. Those things, again, that differ most in origin, mixture and forms imprinted on each, are most hostile, being altogether unaccustomed to unite and very sorry for the bidding of Strife, since it hath wrought their birth.[26]

Let us now compare these ideas of Empedocles with some of the fundamental ideas of Freud, mainly his third and final theory of the instincts.[27] Confronted with the problems of the repetition compulsion in neurotic symptoms and behavior as well as in the transference situation, the negative therapeutic reaction, aggression as manifest in sadistic-masochistic behavior, and the inexplicability of these phenomena in terms of the libido theory and the pleasure-unpleasure principle, Freud felt the need of a new theory of the instincts to account for these puzzling phenomena. In developing his thesis, he spoke of an instinct as an indirect compulsion in organic life to return to a previous state of things,[28] in contrast to an earlier view in which he conceived the instincts as being impelled towards change and development. This is Freud's resolution of the philosophical problem of change and permenency in matter and life, the problem which faced Empedocles twenty-five hundred years ago. From its beginning, the elemental entity would have no wish to change. If conditions had remained the same, it would have repeated the same course again and again, but because of the relation of sun to earth, modification had been imposed upon the course of the organism's life and accepted by the conservative instincts of the organism and accumulated for further repetition. "Those instincts are therefore bound to give a deceptive appearance of being forces tending towards change and progress, whilst in fact they are merely seeking to reach an ancient goal by paths alike old and new."[29] The first instinct then is the instinct to return to the

[25] Fragment 17.

[26] Fragment 22.

[27] For a study of the development of Freud's various instinct theories see Jones, E., "Psychoanalysis and the Instincts" in *Papers on Psychoanalysis*, 5th edition London, Bailliere, Tindale and Cox, 1948, pp. 153-169.

[28] Freud, Sigmund, *Beyond the Pleasure Principle* (1920), London, Hogarth Press, 1950, p. 47.

[29] *Ibid.*, p. 49.

inanimate state, the death instinct. To this are opposed the self-preservation and sexual instincts, biologically founded in the germ cells, which work against the death of the living substance and give to it what can be regarded as potential immortality.[30] They are conservative in that they bring back earlier states of living substance and are peculiarly resistive to external circumstances in that they preserve life itself for a comparatively long period of time. These are designated as the life instincts.

> One group of the instincts rushes forward so as to reach the final goal of life as swiftly as possible; but when a particular stage in the advance has been reached, the other group jerks back to a certain point to make a fresh start and so prolong the journey.[31]

Freud poetizes in designating these two oppositional instincts as Eros [32] and Thanatos, the mythical personifications of life and death by the ancient Greeks. Eros becomes the preserver of all things, Thanatos, the destroyer.[33] Eros, with its contrast of self-preservation and the preservation of the species, ego-love and object-love, aims to bring unity to being, and the death instinct can only lead to disunity and destruction for the organic—death. Here we have a clear statement of the Love and Strife of Empedocles. "The function of Love is to produce union; that of Strife, to break it up again." [34] Summarizing his theory, Freud stated:

> After long doubts and vacillations, we have decided to assume the existence of only two basic instincts, *Eros* and the ***destructive instinct***. The aim of the first of these

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[30] Criticism of the theory will not be discussed in the present communication. For evaluation and criticism of the theory see Fenichel, O., "A Critique of the Death Instincts" (1935), in *Collected Papers*, First Series, New York, Norton, 1953, pp. 363-372. Alexander, F., *Fundamentals of Psychoanalysis*, New York, Norton, 1948, pp. 63-75. Heiman, P., "Notes on the Theory of the Life and Death Instincts," in *Developments in Psychoanalysis*, London, Hogarth Press, 1952, pp. 321-337. The last article mentioned is an affirmation of the theory.

[31] Freud, *loc. cit.* (note 18), p. 54.

[32] Freud borrowed the designation Eros from the Platonic concept of Eros as expressed in the *Symposium*. Comparisons between the theories of Freud and the philosophy of Plato have often been made, even by Freud himself. See Freud, *loc. cit.*, p. 79. Also, Nachmansohn, M., "Freud's Libido Theorie verglichen mit der Eroslehre Platos," *Internationale Zeitschrift fuer Psychoanalyse*, 1915, vol. 3, p. 134. Pfister, O., "Plato a Forerunner of Psycho-Analysis," *International Journal of Psychoanalysis*, 1922, vol. 3, pp. 169-174. Cornford expresses the viewpoint that the ultimate standpoints of Plato and Freud are diametrically opposed. The orgin of Eros for Plato is spiritual and eternal, not a manifestation of the instinct of the flesh, the Eros of Freud. See Cornford, F. M., "The Doctrine of Eros in Plato's *Symposium*" in *The Unwritten Philosophy and Other Essays*, pp. 78-79.

[33] Freud, *loc. cit.* (note 18), p. 71.

[34] Burnet, *loc. cit.*, p. 232.

basic instincts is to establish ever greater unities and to preserve them thus—in short to bind together; the aim of the second, on the contrary, is to undo connections and so to destroy things. We may suppose that the final aim of the destructive instinct is to reduce living things to an inorganic state. For this reason we also call it the ***death instinct.***[35]

From this theory Freud could explain sadism as the death instinct directed outwards, aggression finding discharge in the external world, and masochism as the death instinct driven against the self because of the occurrence of certain impediments to its expression in the external world, with the subsequent internalization by the super-ego as an unconscious feeling of guilt. The compulsive repetition of traumatic experiences and fantasies occurs because of the underlying energies of the destructive instinct. Certain neurotic patients do not respond to psychoanalytic therapy because they are privately driven toward their own destruction—they have an inordinate need for self punishment. Man does not only basically seek pleasure, but is even striving for pain, unpleasure, due to this overwhelming force within him, *Thanatos,* the death instinct.

In the philosophy of Empedocles, mixture and separation of the elements, manifest as movement or change, occur due to the interaction of Love and Strife upon them. The sphere of the elements in its cycle passes through four periods. Initially the sphere contains all the elements mixed together by Love, followed by Strife's entrance and Love's consequent departure from the sphere. Then occurs the phase in which there is a complete separation of the elements because Strife now dominates the sphere. Finally, Love re-enters and Strife departs thus completing the cycle.[36] We shall not go into the workings of the cycle and its cosmogony but rather describe the interpretations of Empedocles concerning the creation of living organisms, as they bear an interesting relationship to a cosmological interpretation of the instinct theory made by Freud in the form of a series of questions. Empedocles wrote of various anatomical groupings such as "heads . . . without necks, arms . . . bare and bereft of shoulders . . . eyes . . . in want of foreheads,"[37] which wandered "seeking for union."[38] The organic combinations, of course, are the work of Love, occurring in the fourth period of the cycle, ". . . out of Water and Earth and Air and Fire mingled together, arose the forms and colours of all those mortal things that have been fitted together by Aphrodite, and so are now come into being. . . ."[39] The plant and

[35] Freud, Sigmund, *Outline of Psychoanalysis* (1938), New York, Norton, 1949, p. 20.
[36] Burnet, *loc. cit.*, p. 234.
[37] Fragment 57.
[38] Fragment 58.
[39] Fragment 71.

animal kingdoms were formed from the four elements under the influence of Love and Strife. In the period of Love with the waning of Strife, the scattered parts were united by chance in a haphazard and fantastic manner, for " Many creatures with faces and breasts looking in different directions were born; some, offspring of oxen with faces of men, while others again, arose as offspring of men with the heads of oxen, and creatures in whom the nature of women and men was mingled, furnished with sterile parts." [40] The coalescences into creatures that were fitted to survive did so, a " survival of the fittest," while the rest perished. This is how one is to account for the creatures that exist today, the result of the evolution of the animals in the Period of the Influxion of Love.

Freud was tempted to present a similar theory, a cosmological projection of Eros, in order to explain the union of " particles " to form life and more highly developed beings in the evolutionary stream. He followed the line of thought developed by Plato in the *Symposium*, which bears the influence of Empedocles, that there were originally three sexes, male, female, and the union of the two. Zeus finally decided to cut the united humans in two, and since then the two parts of man have desired one another for union. After discussion of this theory, Freud asked:

> Shall we follow the hint given us by the poet-philosopher, and venture upon the hypothesis that living substance at the time of its coming to life was torn apart into small particles, which have ever since endeavored to reunite through the sexual instincts? that these instincts, in which the chemical affinity of inanimate matter persisted, gradually succeeded, as they developed through the kingdom of the protista, in overcoming the difficulties put in the way of that endeavor by an environment charged with dangerous stimuli—stimuli which compelled them to form a protective cortical layer? that these splintered fragments of living substance in this way attained a multicellular condition and finally transferred the instinct for reuniting, in the most highly concentrated form, to the germ cells?—But here, I think, the moment has come for breaking off.[41]

Freud, thus, barely manages to avoid the temptation to project his own instinct theory onto the cosmos as the fundamental principle of being. The Empedoclean parallel, however, becomes even more apparent.

Although resisting the temptation for the cosmological application of his theory, Freud did find it a meaningful explanation of certain cultural phenomena, since he believed that the cultural is founded fundamentally in the biological substrate. Freud originally theorized that our civilization evolved at the cost of our sexual impulses, which are inhibited by society.

[40] Fragment 61.
[41] Freud, *Beyond the Pleasure Principle*, pp. 80-81.

partially repressed, but also deflected onto new aims, the process designated as sublimation.[42] The importance of this innate tendency to aggression in man is that it constitutes the main obstacle to the development of culture. Eros aims at binding together individuals, families, tribes, races, nations into one great unity of humanity. But the natural hostilities of man remain, constantly seeking discharge, and in their discharge oppose the program of civilization.[43] Freud states: "And now, it seems to me, the meaning of the evolution of culture is no longer a riddle to us. It must present to us the struggle between Eros and Death, between the instincts of life and the instincts of destruction, as it works itself out in the human species." [44]

Turning now to the philosophical concepts of Heraclitus and the theoretical formulations of Jung, one can observe certain interesting correlations between the Warring Opposites of the philosopher and the Jungian application of the law of the opposites. The primordial and everlasting fire of Heraclitus has certain resemblances to the monistic libido concept of Jung. Likewise, the Heraclitean *Logos* and the collective unconscious of Jung demonstrate similarities. An exhaustive study of either the philosopher or the psychologist is not intended. We shall only touch upon certain areas, as mentioned above, which reveal correspondencies and connections of a direct or indirect nature, which may be of value in the study of origins in contemporary psychological theory.

Heraclitus of Ephesus in Asia Minor flourished about 500 B. C.[45] As with Empedocles the tradition surrounding his life and death is most unsatisfactory. He was probably not a disciple of anyone, but he was acquainted with Milesian cosmology, the poems of Xenophanes, and the theories of Pythagoras. His work can be divided into three discourses; one dealing with the universe, another primarily political, and a final division, theological. This grouping of his ideas probably was not made by Heraclitus himself but was more likely the work of some of his commentators, perhaps an Alexandrian editor.[46] He earned the nickname of the "Dark" because of the many obscurities in his philosophical exposition.[47]

[42] Freud, *New Introductory Lectures on Psychoanalysis*, p. 143.

[43] Freud, Sigmund, *Civilization and Its Discontents* (1930), London, Hogarth, 1930, p. 102.

[44] *Ibid.*, p. 103.

[45] The only substantial ancient biography of Heraclitus was written by Diogenes Laertius, which is translated with running commentary in Kirk, G. S., *Heraclitus: The Cosmic Fragments*, Cambridge, University Press, 1954, pp. 3-13.

[46] Freeman, *loc. cit.*, p. 106.

[47] Burnet, *loc. cit.*, p. 132. It is interesting to note that Jung is often criticized because of the obscurity of his presentation.

Written in a pungent and penetrating oracular style, some of his fragments often prove beyond ready interpretation. This oracular style was the manner of the time, and it is apparent that Heraclitus greatly admired it. Throughout his fragments the manifestation of his solitary and disdainful individuality in readily apparent. With this approach he attempted to shock mankind, which he regarded as dull and stupid, into a realization of the paradox and profundity of the truths he wished to expound. He claimed for himself a prophetic knowledge unknown by the poets or the previous philosophers. He rejected Orphism, considered Xenophanes superficial and had no higher opinion of Pythogaras.[48] Theophrastus took a dim view of his headstrong temperament and manner, stating that it sometimes led him into inconsistencies and incompleteness of statement.[49]

Impressed by the unceasing instability of all individual things, Heraclitus saw in flux the general law of the universe. Flux was in turn explained by his concept of the primordial Fire, the essence of all things, and the tension of the Opposites. For him, the material substrate of all existence was Fire. The real material Fire was the ultimate matter from which all things come and into which all return. For him, the world was an "ever-living Fire," becoming all things while all things are always returning to it. "This world, which is the same for all, no one of gods or men has made; but it was ever, is now, and ever shall be an ever-living Fire, with measures of it kindling, and measures going out."[50] Nothing is ever at rest for a moment. The Fire constantly burns with everything either mounting upwards to serve as fuel or sinking downwards after having nourished the flame. What follows the upward path is Fire and that which goes downward is Water and Earth.

For Heraclitus, existence is maintained by the "strife" or "tension" of the Opposites, nurtured by Fire. It is through the locking of the opposites in their strife that particular things exist. Essentially the Opposites, such as hot and cold, warm and moist, find identity in that they are two aspects of the same process. If there were no cold, there could be no heat, for an object to become warm it must first of all be cold. The same applies to the opposites of wet and dry. "Cold things become warm, and what is warm cools; what is wet dries, and the parched is moistened."[51] Harmony consists in the unending tension between the

[48] Fuller, B. A. G., *History of Greek Philosophy*, New York, Henry Holt, 1923, pp. 118-119.

[49] Burnet, *loc. cit.*, p. 132.

[50] Fragment 20. The Fragments of Heraclitus are quoted from the listing of Burnet, *loc. cit.*, pp. 132-141.

[51] Fragment 39.

Opposites. Peace cannot exist without war, or day without night, rest without motion, harmony without discord. In Anaximander we find the treatment of the strife of Opposites as an "injustice," but Heraclitus, in opposition to this, holds that the Opposites are actually the highest justice of all.[52] God, for him, does not transcend the Opposites, ending their strife in a final static harmony, such as the Pythagoreans believed, but "God is day and night, winter and summer, war and peace, surfeit and hunger."[53] The "Strife of Opposites" becomes an "attunement," and according to this line of thought wisdom for Heraclitus is not a knowledge of many things but is a realization of the underlying unity of the Warring Opposites. "Men do not know how what is at variance agrees with itself. It is an attunement of opposite tensions, like that of the bow and the lyre."[54]

The problem of the Opposites is expressed in a number of other fragments, several of which I quote here: "It is the opposite which is good for us."[55] "Good and ill are one."[56] "Couples are things whole and things not whole, what is drawn together and what is drawn asunder, the harmonious and the discordant. The one is made up of all things, and all things issue from the one."[57] "The way up and the way down is one and the same."[58] "It is not good for men to get all they wish to get. It is sickness that makes health pleasant; evil, good; hunger, plenty; weariness, rest."[59]

From the concepts presented in these fragments, it follows that everything unites in itself opposite qualities and so becomes One. Change is a transition from one condition to its opposite. Thus we can see in the whole of nature this ceaseless alteration of opposite conditions and phenomena and the becoming of a thing in the fluctuating union of the Opposites. Zeller[60] summarizes this Law of the Opposites as follows:

> But though it is necessary that all things should be sundered into opposites, it is equally necessary that the opposites should again combine to form a unity; for that which is most opposed originates from one and the same; it is one essence which, in the course of its changes, produces opposites and again cancels them; which in all things produces itself, and in the working of conflicting principles sustains all is one. In separating itself from itself, it unites itself with itself; out of strife comes existence, out of opposition, union; out of unlikeness, coincidence; One comes out of all.

[52] Burnet, *loc. cit.*, pp. 165-166.
[53] Fragment 36.
[54] Fragment 45.
[55] Fragment 46.
[56] Fragment 57.
[57] Fragment 59.
[58] Fragment 69.
[59] Fragment 104.
[60] Zeller, E., *A History of Greek Philosophy*, vol. II, London, Longmans, Green, 1881, pp. 38-39.

Jung has stated that this law of the regulating function of the Opposites, as originally postulated by Heraclitus, is the most marvelous of all psychological laws.[61] Throughout the Jungian system[62] one notes the omnipresent problem of the Opposites. Here we have the Opposites of conscious and unconscious; personal unconscious and collective unconscious; the four functions divided into opposite groups, the rational and the irrational, which are respectively made up of further contrasting forces, thought and feeling, sensation and intuition; the opposition of the two attitudes, introversion and extroversion; the outer world and the inner world; the persona and the animus-anima complex; the ego and the shadow. These are the fundamental Jungian concepts of psychological functioning and personality structure. This theory of the Opposites, however, has been considerably expanded by him to include the following: ascent/descent; chaos/order; culture/nature; good/evil; grandeur/inferiority; height/abyss; high/low; homosexual/heterosexual; hot/cold; idealism/materialsim; love/hatred; love/will to power; megalomania/inferiority; nominalism/realism; optimism/pessimism; organization/disorganization; personal/impersonal; progressiveness/regressiveness; rational/irrational; and without/within. In the Jungian system, all existence, at least all psychological existence, is rooted in the problem of the Opposites.

For Jung, the Law of the Opposites, *enantiodromia*, a running contrariwise, is the fundamental psychological law. He uses this term to describe the emergence of the unconscious opposite as contrasted to an extreme one-sided tendency which may dominate the conscious life.[63] The unconscious counter-position which first becomes manifest as an inhibition or repression of conscious activities may subsequently lead to an interruption of conscious direction. He gives several examples of historical figures such as Saul of Tarsus and his conversion to Christianity, and the Christ identification of the ill Nietzsche with his deification and later hatred of Wagner.[64] He describes events in the lives of individuals in which they try to live in complete opposition to their former ego. One sees this in changes of profession, divorces, religious conversions, apostasies of every description. These are the symptoms of the swing over to the opposite.

One of the most startling sayings of Heraclitus is that which affirms the

[61] Jung, C. G., *Two Essays on Analytical Psychology*, London, Routledge and Kegan Paul, 1953, p. 71.

[62] For a summary of the Jungian system see Jacobi, J., *The Psychology of C. G. Jung*, 5th edition, London, Routledge and Kegan Paul, 1951.

[63] Jung, *Psychological Types*, p. 541.

[64] *Ibid.*, p. 542.

identity of good and evil.[65] For Heraclitus this did not mean that good is evil and evil is good, but simply that they are two inseparable halves of one and the same thing. For a thing to become good it must already be evil and for a thing to become evil it must already be good. The problem of this pair of opposites, good and evil, has been carefully studied by Jung,[66] and this pair will be utilized in more fully describing the working of the Opposites, according to his system. Good and evil are the specifically moral pair of opposites.

The specific virtues and vices of mankind, according to Jung, are found in the collective psyche like everything else common to mankind. Certain individuals attribute all collective virtues to themselves as if they were their personal merit, and to others all the collective vices of mankind become their personal failures. These two phenomena are illusory, and we see imaginary virtues and imaginary vices which are merely the opposed moral elements contained in the collective unconscious. As demonstration of this fact, Jung refers to the collective psyche in the case of certain primitive people whose virtues are extolled by some observers, while others record the most unfavorable impressions of the same tribe. For the primitive whose personal differentiation is just beginning, both of these judgments are valid because his mentality, according to Jung, is essentially collective. He is still more or less identical with the collective psyche, and the individual personality and state of consciousness are merely in a very early stage of development.[67]

Jung points out that the problem of the Opposites becomes a very important one in the second half of one's life.[68] After the natural aim, the begetting of children and protecting the family is accomplished, one is faced with a cultural aim, the problems of truth and being. Previous values may break down and the alternative may be sought. The goal of understanding such problems is not a conversion into the opposite but a conservation of previous values together with the recognition of their opposites leading to a unity in the personality. This is the goal of Jungian analysis. The self is a union of the Opposites *par excellence*. Without the experience of the Opposites there can be no experience of wholeness and unity. This has very little to do with intellectual insight or with empathy, but rather with what we call fate. It is interesting to note that for Heraclitus it is the law of fate acting upon the cosmos which

[65] Fragment 57.
[66] Jung, C. G., *Psychology and Alchemy*, New York, Bollingen, 1953, pp. 19-22.
[67] Jung, *Two Essays on Analytical Psychology*, pp. 144-148.
[68] *Ibid.*, pp. 73-75.

brings into being the strife and tension of the Opposites. Jung states that although insight into the problem of the Opposites is absolutely imperative, there are very few people who can stand it in practice. In the processes of individuation one seeks an awareness and union of the opposites with the aid of the mandala symbol.[69] For example, in the symbol of *yang* and *yin*, a Taoistic pair of opposites, light and dark, one sees union in their symbolism in the mandala as the light and dark halves of the circle. In a like manner the light and dark halves of the personality too must find union.

In Heraclitus' concept of the *Logos* we find an idea which has certain similarities to the idea of the collective unconscious as formulated by Jung. *Logos* is the thought which steers all things and is to be discovered within oneself as well as in nature. This was not a private wisdom accumulated by "learning many things" from others, but a wisdom "common to all" if men will only look inward and have the souls to understand it.[70] It is the portion of the Fire that is within us "So we must follow the common, yet though my Word (*Logos*) is common, the many live as if they had a wisdom of their own."[71] The *Logos* is the true One in Heraclitus' system. It is the only thing that persists in change, and it is present everywhere. This cosmological concept is similar to that which lies within the Jungian system, the collective unconscious. The collective unconscious is impersonal or trans-personal because it is detached from anything personal and is entirely universal. It is found everywhere in every individual. It is the repository of the primordial images, the most ancient and universal "thought forms" of humanity. Here the prior experiences of mankind rest with all their oppositional qualities to act conflictually with consciousness but also to give mankind its greatest wisdom.[72]

As was mentioned, Fire for Heraclitus was the primary element, the base of all substance, ever-living and always becoming all things. Jung has regarded fire as an important symbol of the libido. Libido, he equated with psychic energy and defined it as the energy concept, a dynamic force in its totality underlying all the forms and activities of the psychic system.[73] It is this, the libido, which gives vitality to the psychic system

[69] Jung, *Psychology and Alchemy*, p. 27.
[70] Freeman, *loc. cit.*, p. 118.
[71] Fragment 92.
[72] Jung, *loc. cit.*, pp. 65-70.
[73] Jung, C. G., "On Psychical Energy" in *Contributions to Analytical Psychology*. London, Routledge and Kegan Paul, 1928, pp. 1-76.

and accounts for the energy of its processes. This concept has similarities to the Heraclitean Fire, although again one is dealing with psychology in Jung and cosmology in the pre-Socratic. Fire, however, is a symbolic manifestation of the libido, being representational of the sexual instincts [74] and of the libido in general.[75]

In this brief communication, an attempt has been made to distinguish certain interesting analogies existing between two pre-Socratic philosophers, Empedocles and Heraclitus, and two modern psychological theorists, Freud and Jung. This is not meant to be an accommodation of the thought of Empedocles to that of Freud, or the thought of Heraclitus to that of Jung. However, when we examine the resemblances between the concepts of the pre-Socratics and these modern psychologists, the possibility of influence on Freud by Empedocles and the more positive influence of Heraclitus on Jung become apparent. Freud himself stated that the two fundamental dynamic principles of Empedocles, Love and Strife, are nominally and functionally the same as the two primal instincts postulated by psychoanalysis. Jung has taken the *enantiodromia* of Heraclitus and converted it into a fundamental psychological principle, the emergence of the unconscious opposite in symbol and thought. What has been noted here tends to confirm the observation that in many ways the theoretical formulations about the fundamental problems of man and his psyche have not greatly changed in over 2500 years, and in many ways the ideas of our age appear dependent and related to ideas expressed by the pre-Socratic philosophers. What puzzled the pre-Socratics, namely the problem of the opposing forces within the self and the universe, continues to baffle us. However, what was once interpreted cosmologically is now viewed largely as a projection of one's own psychic forces, a manifestation of an endopsychic process, which in turn finds its roots in biology. But the Opposites remain as the fundamental problem of human existence.[76]

[74] Jung, C. G., *Psychology of the Unconscious*, New York, Moffat Yard, 1916, p. 167.
[75] Jung, C. G., *Integration of the Personality*, London, Routledge and Kegan Paul, 1940, p. 83.
[76] The problem of ambivalence and its relationship to the Opposites has not been discussed in this communication. Ambivalence, the coexistence (usually unconscious) of opposite or antithetic emotions toward a given object, is usually related to the love-hate situation. This was believed by Freud to be a resultant of (a) constitutional bisexuality, (b) identifications with love objects, and (c) the life and death instincts.

HOSPITALS, MEDICAL CARE AND SOCIAL POLICY IN THE FRENCH REVOLUTION *

GEORGE ROSEN **

L'homme est le même dans tous les États, le riche n'a pas l'estomac plus grand que le pauvre; les besoins naturels étant partout les mêmes, les moyens d'y pouvoir doivent être partout égaux.

Rousseau, *Émile*, III

Il faut faire disparaitre du sol de la République la servilité des premiers besoins, l'esclavage de la misère et cette trop hideuse inégalité parmi les hommes qui fait que l'un a toute l'intempérance de la fortune et l'autre toutes les angoisses du besoin.

Barère, Rapport du 22 Floréal an II.
(Buchez et Roux, *Histoire parlementaire de la révolution*, IX, 95.)

There were good reasons for the enthusiasm with which the French people welcomed the States-General in 1789. Here was an opportunity to air grievances which had accumulated during two centuries of arbitrary rule, and to deal with problems clamoring for solution. Prior to the meeting of the States-General every electoral assembly had been entitled to draw up an address to the crown (*cahier de doléances*) embodying its complaints and demands. These very human documents reveal a vivid and unique picture of a great country on the eve of a revolution. They reveal with equal clarity the deep discontents which provided the driving force for the Revolution, and the programs for reform popularized by the writers of the day.

The *cahiers* reveal as well how obvious it was to many Frenchmen by the last decade of the eighteenth century that profound changes in social organization were needed to deal effectively with problems of welfare and health. This recognition was intimately interlocked with and reinforced by contemporary views on the social utility of reason, enlightenment, and scientific and technological progress. In turn, these views were firmly grounded in the conviction widespread in the eighteenth century that man was destined to be happy in this life.[1] This attitude is evident in Pope's

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[1] Paul Hazard: *La pensée européenne au XVIIIème siècle* (3 vols.), Paris, Boivin et Cie, 1946, vol. 1, pp. 17-33.

apostrophe to "Happiness! Our being's end and aim!"; or in Montesquieu's remark that throughout life one should seek to have as many moments of happiness as possible.[2] It is reflected as well in the spate of publications on public felicity that appeared throughout the century.[3] There was also general agreement that for happiness, health was necessary. But how to attain this desired state?

Whatever their differences, the *cahiers* show that all orders of society were at one in accepting poverty and mendicity as the major problems to which other social problems were related. Any consideration of questions of health had to take account of the grinding poverty which oppressed a large part of the rural and urban population. Exact information is lacking, but contemporary opinions and estimates help to define the character and dimensions of the problem. Observations gathered over more than forty years led Vauban in his *Dixme royale* (1707) to estimate that a tenth of the French population was reduced to beggary, while another five-tenths lived in dire poverty, continually on the verge of destitution.[4] Baudeau, in 1765, stated that out of eighteen million Frenchmen, three million were paupers.[5] According to the census of 1791, Paris had 118,884 indigents in a population of 650,000.[6] In the same year the Committee on Mendicity of the Constituent Assembly reported that even in normal times about one-twentieth of the population of France were destitute and required some kind of relief, while in periods of distress, this proportion increased to one-tenth or one-ninth of the population.[7] In fact, indigence was so widespread that the very idea of the "people" was part and parcel of the concept of poverty. Thus, Necker, in 1775, seeking to define the term, "the people," wrote that it was impossible either "to

[2] Alexander Pope: *An Essay on Man*, New Haven, Yale University Press, 1950, p. 128; Montesquieu: *Oeuvres complètes* (Bibliothèque de la Pleiade, 2 vols.), Paris, 1951, vol. 1, p. 1267.

[3] See for example, L.-A. Muratori: *Della pubblica felicità*, 1749; F.-J. de Chastellux: *De la felicité publique*, 1772; Adam Ferguson: *An Essay on the History of Civil Society*, 1782 (Sections IX and X: Of National Happiness).

[4] Vauban: Projet d'une dixme royale, in Eugène Daire (ed.): *Economistes-financiers du XVIII^e siècle*, Paris, Guillaumin, 1843, pp. 31-154.

[5] Maxim Leroy: *Histoire des idées sociales en France*, t. I (*de Montesquieu à Robespierre*), Paris, Gallimard, 1946, p. 54.

[6] E. Levasseur: *Histoire des classes ouvrières en France depuis 1789 jusqu'à nos jours* (2 vols.), Paris, L. Hachette et Cie., 1867, vol. 1, p. 85, note 2. It should be noted that these figures are only approximate. For a discussion of the population problem see A. Landry: La démographie de l'ancien Paris, *Journal de la Societé Statistique de Paris* 76: 34-45, 1935.

[7] Shelby T. McCloy: *Government Assistance in Eighteenth Century France*, Durham, N. C., Duke University Press, 1946, p. 262.

fix the limits of the word or the degree of indigence which characterized it." It could be defined, he concluded, only as "the most numerous and most miserable class" in society.[8]

At the root of the problem of poverty were economic and social conditions, frequently aggravated by natural catastrophes such as floods or severe winters. But whatever the cause, the hard fact remained that a large part of the French people needed assistance of some sort. Employment, food, medical care, and shelter are the needs that stand out most sharply. The problem of relief to the needy was further exacerbated by the failure of existing private and public agencies.[9] Down to the time of the Revolution, the basic principle of social assistance in France was that relief to the needy should be provided locally as far as possible. Each community was supposed to care for its own indigent, sick, and afflicted. Relief was also provided by the church, charitable organizations, and individuals. The provincial or royal government stepped in only when problems of relief were too large for the local community to handle.

In line with practices started during the reign of Louis XIV, the royal government contributed to the maintenance of hospitals and the provision of medical care in cities and rural districts.[10] At periodic intervals medicines were sent to the provinces for free distribution to the needy. To cope with widespread epidemics, medical personnel (physicians and surgeons) as well as medicaments might be dispatched to the ravaged district. The problem of medical personnel, however, was not limited to periods of epidemic outbreak. In fact, throughout the century there was a great shortage of physicians, surgeons, and midwives. Efforts to deal with this problem were made in almost all instances by local communities. One of the most common methods was to contract annually with a physician or surgeon to provide medical care to the needy. In some instances, private charitable organizations, religious or secular, arranged for domiciliary medical care to the poor. Thus, in Paris, the parish of Saint-Eustache had three physicians and two surgeons who attended the sick poor in their homes. However, if the illness lasted more than three weeks

[8] Necker: *Sur la législation et le commerce des grains*, Paris, 1775, pp. 165 ff., cited by Leroy, *op. cit.*, pp. 54-55.

[9] Henri Sée: *Economic and Social Conditions in France during the Eighteenth Century*, New York, Alfred A. Knopf, 1927, pp. 214-220; Philippe Sagnac: *La formation de la société Française moderne*, Paris, Presses Universitaires de France, 1946, vol. 2, pp. 72, 74; Georges Lefebvre: *La Révolution Française*, Paris, Presses Universitaires de France, 1951, p. 58, McCloy, *op. cit.*, pp. 463-465.

[10] McCloy, *op. cit.*, pp. 158-173, 181-198.

the patient was sent to the Hôtel-Dieu.[11] Various mutual aid organizations also provided medical care for their members.[12] In the French glass industry, benefits to the workers in some cases included medical attention, monetary assistance during sickness, and old age pensions. The gravediggers guild of Paris provided hospitalization for its sick members. An association of domestics organized at Paris in 1789 provided medical attention for its members when sick. Governmental authorities also endeavored to improve conditions by providing free instruction in surgery and midwifery. Sometimes they published or purchased for distribution books intended to enlighten the public on health matters. Perhaps the most popular of these was Tissot's *Avis au peuple sur sa santé*, which went through ten editions in six years.

Throughout the century it became increasingly evident, however, that private charitable organizations and local authorities were unable to deal adequately with poverty and its associated health problems. More and more the opinion became prevalent that care of the needy, including the provision of medical attention, was an obligation of society to be carried out through the agency of the state. The physiocrat Baudeau, in 1765, stated as a fundamental axiom "that the true poor have a real right to demand basic necessities."[13] This position was formulated even more explicitly by Montyon, the author of the *Recherches et considérations sur la population de la France*, published at Paris in 1778.[14] With a lively awareness of the relations between social conditions and health, he directed attention to the inimical effect of poverty on duration of life, commenting that poverty was "a slow poison which destroys the person attacked by it." High infant mortality among the poor, diseases resulting from the trades by which men are compelled to support themselves and their families, ill health produced by malnutrition—these were some of the health problems among the poor classes of the community. In view of the sig-

[11] Paul Delaunay: *Le monde médical parisien au dix-huitième siècle*, Paris, Jules Rousset, 1906, p. 90; Alfred Franklin: *La vie privée d'autrefois: Variétés chirurgicales*, Paris, E. Plon, Nourrit et Cie., 1894, pp. 297-298.

[12] Warren C. Scoville: Labor and Labor Conditions in the French Glass Industry, 1643-1789, *Journal of Modern History* 15: 287, 1943; McCloy, *op. cit.*, pp. 456-457.

[13] Baudeau: *Idées d'un citoyen sur les droits et les devoirs des vrais pauvres*, Paris-Amsterdam, 1765, vol. 1, p. 169, cited by Leroy, *op. cit.*, vol. 1, p. 320.

[14] Moheau: *Recherches et considérations sur la population de la France*. Published with an introduction and analytical table by René Gonnard, Paris, Paul Geuthner, 1912. This book was originally published under the name of Moheau, but it has now been proven to be the work of A. J.-B. Auget, Baron de Montyon (1733-1820). The main points are summarized by Gonnard, and newer evidence is presented by Paul E. Vincent: French Demography in the Eighteenth Century, *Population Studies* 1: 44-71, 1947-48.

nificance of population for the state, it behooves the government to deal with these problems, particularly since the poor people are the largest population group. Such a program must deal equally with the economic, social, and medical aspects of these problems. Furthermore, commenting on conditions in hospitals and related institutions, Montyon pointed out that men who had given much thought to the problem of social assistance felt it would be better to suppress completely all asylums for the poor, for infants, and old people and to retain only those intended for the sick. "In a well-organized state," he wrote, "there are no paupers, except for invalids or loafers; in extraordinary cases the poor should receive aid at home and the best charity is assurance of work." [15]

Similar ideas appeared in the provincial assemblies of 1787-1789. A specific example is Lavoisier's proposal, in 1787, to the Assembly of Orléanais of a scheme for insurance against poverty and old age.[16] Imbued likewise with this spirit was the commission of which Lavoisier was a member, appointed in 1786 to study the hospitals of Paris, particularly the Hôtel-Dieu. One of the most important members of the commission was Jacques René Tenon (1724-1816), surgeon and oculist. The commission made a thorough study of the problem and proposed that the Hôtel-Dieu should be abandoned. Its patients would be moved to four new hospitals to be established in widely separated suburbs of Paris. All this, however, came on the very eve of the Revolution, and in the ensuing upheaval the idea was abandoned. Nonetheless, the commission and its work have a significance transcending the immediate problem with which it dealt. For one thing, through Tenon, its guiding spirit, it exerted a continuing influence on future developments. Secondly, the work of the commission focused ideas and proposals expressed earlier by thinkers and reformers as diverse as Diderot, Morelly, Chamousset, and Montyon.[17]

[15] *Ibid.*, p. 287.

[16] Mémoires presentées à l'assemblée provinciale de l'Orléanais, in *Oeuvres de Lavoisier* publiées par . . . le Ministère de l'Instruction Publique et des Cultes, Paris, Imprimerie Nationale, 1893, vol. VI, pp. 241-250; Douglas McKie: *Antoine Lavoisier: Scientist, Economist, Social Reformer*, New York, Henry Schuman, 1952, pp. 244-247.

[17] Morelly, an otherwise unknown *philosophe*, who stressed the need for social assistance to the poor and to older people, proposing that the state assume this responsibility and that this function be financed by transferring all ecclesiastical wealth to the state. Morelly's ideas are most precisely stated in his principal work, *Code de la nature*, which appeared in 1755.

Louis Sebastien Mercier (1740-1814) was a writer and politician, who is best known today for his satiric *Tableau de Paris*. A follower of Rousseau, he became a member of the Convention, where he belonged to the Girondists. His utopia, *L'an deux mille quatre cent quarante*, describing Paris as it would be in 2440 A. D., was published in 1770.

Claude Humbert Piarron de Chamousset (1717-1773), a wealthy Parisian philanthropist,

But while a recognition of the need for change was present in all orders of society, significant differences prevailed over the precise steps to be taken and over the tempo at which social change should take place. This was the situation that faced France on the eve of the Great Revolution, and the context within which the revolutionary governments would undertake to deal with questions of health and welfare.

II.

The States-General assembled on May 4, 1789. Not until the end of January, 1790, however, did the Constituent Assembly turn to an investigation of the serious social problems demanding attention The solicitude of the Assembly for the cause of the poor and the unfortunate was not spontaneous, but owed its origin rather to the initiative of the Paris commune. For the workers of Paris 1789 was a bad year. An exorbitant increase in food prices coincided with the aftermath of a hard winter, a bad harvest, and unemployment resulting from political unrest.[18] The cruel distress that prevailed led to unrest among the workers and aroused demands for assistance to the poor. In December 1789, Boncerf,[19] a municipal official at Paris, and Lambert, supervisor of apprentices at the Hôpital Général, addressed pamphlets to the Assembly calling attention to the pressing problem of the poor. The latter, who had already published numerous philanthropic brochures,[20] demanded a committee "to apply especially for the protection and preservation of the unpropertied class the great principles of justice decreed in the Declaration of the Rights of Man and in the Constitution." [21] The Paris commune vigorously sup-

dedicated his life to the public welfare. He was interested in such matters as a postal service for Paris, a registry for servants and workmen, the organization of fire insurance, and the care of the sick. For a time he served as Inspector-General of military hospitals. In 1754, Chamousset's *Plan d'une maison d'association*, outlining a scheme for medical care and hospitalization insurance, appeared anonymously at Paris.

For Montyon see footnote 14 above.

[18] Grace M. Jaffé: *Le mouvement ouvrier à Paris pendant la Révolution Française (1789-1791)*, Paris, Presses Universitaires de France, 1924, pp. 41-61.

[19] Pierre-François Boncerf (1745-1794), engineer and administrator, in 1776 had published a pamphlet entitled *Les inconvénients des droits féodaux* which was condemned to be burned. In 1789 he was employed by the municipality. During the Revolution (1792-1793) he was arrested and tried before the Revolutionary Tribunal. He escaped death by one vote.

[20] C. Chassin: *Les élections et les cahiers de Paris en 1789*, Paris, Jouaust et Sigaux, 1888, vol. 2, pp. 579-581.

[21] Camille Bloch and Alexandre Tuetey: *Procès-verbaux et rapports du Comité de Mendicité de la Constituante 1790-1791* (Collections de documents inédits sur l'histoire

ported this proposal, but it was not until the end of January, 1790, that the procrastinating Assembly finally appointed a committee to seek ways and means of destroying mendicity and relieving the sick, the infirm, and the aged poor.

Initially, the Committee on Mendicity consisted of four appointees, but by April 1790 eighteen members were participating in its work, and a nineteenth member was added in July of that year. It was a diverse group comprising clergymen, lawyers, officials and administrators, physicians, and soldiers. Several years later, two of the lawyers, Bertrand Barère and Pierre-Louis Prieur (of the Marne), would occupy the center of the revolutionary stage as members of the Committee of Public Safety.[22] Of the two physicians, one, Joseph Ignace Guillotin, is remembered today chiefly in connection with the beheading machine known as the guillotine; the other, Michel-Augustin Thouret, in 1794, became the director of the reorganized Paris medical school, the École de Santé, and later dean of the medical faculty of Paris. The leading spirit of the Committee, however, was its chairman, the Duc de la Rochefoucauld-Liancourt, one of the great noblemen of France, who even before the Revolution had turned his attention and given thought to problems of pauperism and social assistance, of hospitals and health.[23]

Setting to work without delay, the Committee undertook to investigate and to deal with all questions relating to pauperism, mendicity, charity, and assistance in all forms, whether in institutions or at home. By April 30, 1790, Liancourt had prepared a plan of action which was adopted by the Committee and which provided the basis for its further work.[24] In order to carry out its broad program as efficiently as possible, the Committee organized itself into several sections to deal with specific problem areas such as aid to the urban and rural poor, aid to foundlings, administration and finances, and repression of mendicity.

From February 2, 1790, to September 25, 1791, the Committee held seventy sessions. During these eighteen months the commissioners labored sedulously at their task. Casting their nets as widely as possible, they endeavored to collect whatever information appeared pertinent to the

économique de la Révolution Française publiés par le Ministère de l'Instruction Publique). Paris, Imprimerie Nationale, 1911, p. 1.

[22] R. R. Palmer: *Twelve Who Ruled. The Committee of Public Safety during the Terror*, Princeton, Princeton University Press, 1941, pp. 8-9, 14.

[23] Ferdinand Dreyfus: *Un philanthrope d'autrefois: La Rochefoucauld-Liancourt 1747-1827*, Paris, Plon-Nourrit et Cie., 1903, pp. 34-35, 44-46.

[24] Bloch and Tuetey: *op. cit.*, pp. 23, 309-327.

problem of public assistance.[25] Advice and information on many topics were solicited and obtained from various departments of the central government, from provincial municipalities, from other committees of the Constituent Assembly, from hospital administrators and from members of learned societies such as the Academy of Science and the Royal Society of Medicine. Throughout its existence the Committee corresponded actively with public bodies, administrative officials and private persons both in France and in foreign countries. For example, on April 23, 1790, Liancourt wrote on behalf of the Committee to Dr. Alexander Hunter of York for information on the mental hospital in that city.[26] On November 1, 1790, having received no reply, he addressed himself to Richard Price, the famous dissenting minister, for information on the treatment of the mentally ill, as well as on the handling of bastard children.[27] Not content with information obtained by correspondence, the Committee held hearings for all who might have information, ideas, or proposals bearing on the question of public assistance. Finally, the commissioners recognized the need to visit the hospitals and other institutions for the poor in Paris, and as far as possible to learn at first hand the actual conditions in these establishments.[28]

The term "hospital" in eighteenth century France carried a broader connotation than it does today. It covered a variety of charitable institutions established for the benefit of the needy, whether sick, disabled, or dependent. Thus, while a number of establishments were hospitals in our sense of the word, others were asylums housing unfortunates of different kinds.

Paris, in 1789, had two classes of hospitals. Those concerned primarily with the care of the sick were administered by the Bureau of the Hôtel-Dieu. In this group for example, were the Santé hospital, the hospital for Incurables, the Hôtel-Dieu and the Hôpital Saint-Louis. The head of

[25] Alexander Tuetey: *L'assistance publique à Paris pendant la Revolution*, vol. I. Les *hôpitaux et hospices 1789-1791*, Paris, Imprimerie Nationale, 1895, pp. II-VIII; Bloch and Tuetey, *op. cit.*, pp. XXVIII-XXXIX.

[26] Bloch and Tuetey, *op. cit.*, p. 19; Alexander Hunter (1733-1809) was a Scottish physician who helped found the hospital for mental patients at York. In 1792, he published a book entitled *Observations on the Nature and Method of Cure of the Phthisis Pulmonalis . . . with the Origin, Progress and Design of the York Lunatic Asylum.*

[27] Bloch and Tuetey, *op. cit.*, pp. 163-164; For Richard Price see Carl B. Cone: *Torchbearer of Freedom. The Influence of Richard Price on 18th Century Thought*, Lexington, University of Kentucky Press, 1952.

[28] Dreyfus, *op. cit.*, pp. 153-160; Bloch and Tuetey, *op. cit.*, pp. 32, 38, 57, 54, 127, 226; Michel Bouchet: *L'assistance publique en France pendant la Révolution*, Paris, Imprimerie Henri Jouve, 1908, pp. 146-150.

the Bureau was the Archbishop of Paris and it comprised a number of municipal administrators and legal officials as well as ten laymen. The Bureau of the Hôpital Général administered the institutions for the aged and the indigent, among them the Bicêtre, the Salpêtrière, the Pitié, and the Foundling Hospital. Administrative responsibility for these establishments rested with the same officials who looked after the Bureau of the Hôtel-Dieu, and to whom were added eighteen laymen. The sole agency for domiciliary assistance was the Grand Bureau des Pauvres which also had two hospitals, the Trinité for children and the Petites-Maisons for the aged.[29]

Various members of the Committee took part in the survey of these institutions, but Liancourt was the driving force. Between May and September 1790, he alone or together with several colleagues investigated some nine hospitals. Furthermore, he was responsible for the preparation of the reports embodying the results of all the visits made by the commissioners.[30] These reports contain a mass of information on conditions in the Paris hospitals, and more generally on the state of public assistance to the sick, the disabled, and the aged. In the main the reports confirm the findings of pre-revolutionary investigators and underline the need for reform. Based on this survey as well as on information gathered from a wide variety of other sources, the Committee concluded that a new organization of public assistance was needed. On December 1, 1790, Liancourt presented to his colleagues a plan for a complete national system of assistance to all in need through no fault of their own.[31] Later, as a pendant to this plan, he prepared a proposal for the reform of public assistance at Paris.[32]

Before turning to the proposals, however, it is necessary to glance briefly at the environment within which the Committee on Mendicity carried out its appointed task, and to which Liancourt's plans were clearly related. The Constituent Assembly faced a twofold task, to liquidate the old regime and, at the same time, to construct the new France. The Declaration of the Rights of Man promulgated by the Assembly abolished

[29] Léon Lallemand: *Histoire de la charité*, vol. 4, part i, Paris, Alphonse Picard et Fils, 1940, p. 331; Dreyfus, *op. cit.*, p. 154.

[30] Bloch and Tuetey, *op. cit.*, pp. 575-693.

[31] Quatrième rapport du Comité de Mendicité. Secours à donner à la classe indigente dans les différents âges et dans les différentes circonstances de la vie, par M. de La Rochefoucauld-Liancourt, in: Bloch and Tuetey, *op. cit.*, pp. 383-464. See also subsequent reports.

[32] Rapport sur la nouvelle distribution des secours proposés dans le department de Paris, par le Comité de Mendicité, in: Bloch and Tuetey, *op. cit.*, pp. 758-777.

the privileges of the *Ancien Régime*. The paragraphs dealing with the freedom and equality of the individual, and with the sovereignty of the nation and the law provided the pillars upon which the constitution prepared by the Assembly was intended to rest. But how to turn these general principles into specific acts? This was the problem that the Assembly had to face. It was the more difficult because there was no accepted design for the new France, and the new structure as it evolved had to be erected on ground encumbered by the debris of the old.

The Paris of the first years of the Revolution was hardly the place to discuss calmly and judiciously how best to apply the lofty principles of the Revolution to specific problems. All Paris was in a ferment, and an atmosphere of tension, suspicion, and suppressed anger pervaded the city. The political problem was complicated by economic crisis. Fear of famine, anger provoked by hoarding, and resentment of the high cost of living mingled and alternated in the popular consciousness with revolutionary idealism and patriotic confidence in the future of France.[33] In that dawn of human freedom it was bliss to be alive, but the deputies could hardly go out of the Assembly without being reminded of urgent problems pressing for immediate solution. Food riots began at Versailles in January, 1790, and recurred during the following months. Expedients had to be devised to deal with the exigencies of the moment.

This was the situation faced by the Committee on Mendicity and the atmosphere in which it endeavored to carry out its task. The hospital problem is a case in point. The economic storm which had been gathering ominously for several years before the Revolution broke in all its fury in 1789. As a result, hospital revenues fell heavily. According to the Committee, the income of 1,438 hospitals fell from 20,874,665 livres in 1788 to 13,987,778 livres in 1790. In Paris there was a drop in hospital revenue from 7,958,799 livres to 4,129,206 livres. Hospital income was derived from rentals on real estate belonging to the institutions; from taxes, fines, lotteries, and occasional grants by the central or local governments; and from private charity in the form of legacies and gifts. The political and economic crisis affected all these sources. Fear, emigration, and economic depression diminished private charities. Furthermore, inability to pay taxes and a decrease in revenues from hospital investments intensified the financial plight of the institutions. Finally, in March 1791,

[33] Georges Lefebvre: *La grande peur de 1789*, Paris, Librairie Armand Colin, 1932; *idem*: *Études sur la Révolution Française*, Paris, Presses Universitaires de France, 1954, pp. 271-387; *idem*: *La Révolution Française*, Paris, Presses Universitaires de France, 1951, pp. 131-133.

all indirect taxes were suppressed, and on May 1, 1791, the *octroi*, the chief tax for hospital revenue, was abolished. As a result, hospital revenue from taxes disappeared, and the hospitals became completely dependent on the government. To deal with the immediate need, grants were made to the hospitals by the state in 1791 and 1792.[34] But the larger question still remained, how to organize the hospitals and their functions and how to finance them?

In the light of these problems, it is not surprising that there are two parts to the work of the Committee. The first comprises those measures proposed to deal with immediate problems; the second involves the preparation of a national and systematic plan for the reconstruction of public assistance which would be a part of the order of the new France. In the former category fall the efforts of the Committee to deal with the *ateliers de charité*, charity workshops set up to provide work relief for the unemployed. Much more significant in the long view, however, is the plan developed by Liancourt for a national system of assistance to the needy.

This plan is important not because it was ever realized, but rather because of its seminal ideas and breadth of view. The influence of the pre-revolutionary reform movement is clearly evident, and the mark of Rousseau's ideas on Liancourt is inescapable. The plan, however, developed the implications of the earlier ideas and proposals, and carried them forward to a level at which their significance transcended the immediate situation and the limits of the period.

After pointing out that no government had yet given constitutional recognition to the problem of assistance, Liancourt proclaimed the right of every man to existence.[35] "It appeared to the Committee," he asserted, "that this fundamental truth of all society, which imperiously demands a place in the Declaration of the Rights of Man, should be the basis of every law and every political institution which proposes to wipe out mendicity. . . . No state has yet considered the poor in its constitution. . . . The idea has always been to give charity to the poor, but never of asserting the claims of the poor on society, or those of society on them. There is the great task for the French constitution to achieve, since no other has yet recognized and respected the rights of man in this way. . . . The duty of society, then, is to seek to prevent distress and misery, to provide assistance in these circumstances by offering work to those who need it to live, by forcing them to work if they refuse, and finally by assist-

[34] McCloy, *op. cit.*, p. 199.
[35] Bloch and Tuetey, *op. cit.*, p. 310.

ing without work those who because of age or infirmity lack all means of providing for themselves." [36] In short, while accepting poverty as an evil inherent in human society, it was felt that " where there existed a class of men without means of support, at that point there existed a violation of the rights of humanity, there the equilibrium of society was disturbed," and action had to be taken to restore the balance.

Consequently, if public assistance is an obligation of society, it must be governed by principles other than those of charity.[37] It is no longer a concern only of an individual or of a community, but rather of the nation as a whole, and must be organized and financed on a national basis. Furthermore, if assistance is a national charge, all resources intended for this purpose should be nationalized. All wealth and possessions from which revenue is derived to support hospitals and other charitable institutions should be declared the property of the nation (*biens nationaux*). The financial resources allocated by the state for public assistance would be divided into two funds. The first would provide for the indigent sick, foundlings, the aged, the disabled, and for houses of correction, and the financial allocations would be distributed by departments, districts, and municipalities. Administrative machinery would be set up to administer and to supervise the work. The second would be a reserve fund to deal with extraordinary situations and unforeseen catastrophes.

Liancourt recognized full well the important role of sickness as a cause of indigency, and the first section of the plan deals with assistance to the sick poor in country and city.[38] These unfortunates should receive free and complete medical care promptly. As far as possible the sick poor should be attended at home, where they would remain in familiar surroundings. Each rural district (*canton*) would have a physician or surgeon appointed by the department, who would care for the indigent and supervise the health of children receiving assistance. These practitioners would render care when called. At stipulated times they would inoculate the children and adults on their panels. In the event of serious or epidemic disease, they would report to the welfare bureau of the district or department and request consultation from physicians attached to these bodies. Each year these practitioners would be required to report to the district office their observations and reflections on the climate and the soil, on the epidemics that had occurred, on the treatment of these diseases, and

[36] *Ibid.*, pp. 310, 328, 317.
[37] *Ibid.*, pp. 380-385.
[38] *Ibid.*, pp. 399-426.

to make a comparison of births, marriages, and deaths. The position of cantonal physician or surgeon would carry a remuneration of 500 livres. Midwives approved by the health agency of the canton would be paid out of public funds for delivering indigent women. Medicaments would be provided by a centrally located depot in the canton, in such a manner in each locality that the service would be as efficient, convenient, and economical as possible.

As in the country, the indigent town dweller would, insofar as possible, receive free medical attention at home. Towns of less than 4000 inhabitants would share provision for medical care with the rural areas of their canton. Towns of 4000 to 12,000 people would have one physician or surgeon to care for the sick poor. Municipalities with more than 12,000 people would have one practitioner for each administrative district (*arrondissement*). Liancourt saw that in large cities particularly domiciliary medical care would not be enough. He proposed, therefore, that cities of more than 4,000 population have general hospitals to receive those indigents who could not be attended at home. These establishments would not contain more than 150 beds. In addition to these, large cities would have special hospitals for obstetrics, major surgical procedures, for contagious diseases, venereal diseases, and curable mental illness.

The proposals advanced by the Committee also included assistance to foundlings, aid to large families, workshops for the unemployed, punishment of recurrent beggary, aid to the aged—in short, projects dealing with all the social problems of eighteenth century France. The budget for this program of social assistance was calculated at 51.5 million livres per year. Of this sum, 12 million livres were estimated for the indigent sick, 27.5 million for children, the aged and the disabled, 5 million for work relief, 3 million for repression of beggary and vagabondage, and 4 million for reserves and administration.[39] In addition, the Committee explored the possibility of creating a system of social insurance as a means of preventing indigency by promoting provident saving.[40] This was the plan developed by Liancourt and presented by the Committee on Mendicity to the Constituent Assembly. Basic to the plan was the premise that from the cradle to the tomb, man henceforth in the new France would be an integral member of a maternal and provident society.

These generous hopes, however, were not to be realized. The Assembly was concerned with other matters. The Constitution of September 3,

[39] *Ibid.*, pp. 551-552.
[40] *Ibid.*, pp. 454-464.

1791, stated simply that there " will be created and organized a general establishment for public assistance to provide for foundlings, care for the infirm poor, and provide work for the indigent who are unable to secure it themselves." [41] On September 26, Liancourt demanded that the proposals for organizing public assistance be placed on the agenda for discussion. Calling attention to the precarious financial situation of the hospitals, he pointed out that the abolition of the toll (*octroi*) had deprived them of their income, and that nothing had been done to solve the problem. The following day Liancourt returned to the subject, but to no avail. Prior to adjournment, however, the Assembly expressed the view " that the immensity of its labors had prevented it, in this session, from organizing the assistance which had been ordered to be established by the Constitution," and left to its successor " the honorable task of fulfilling this duty." [42] Nevertheless, the ideas had been sown; they would germinate in the future.

III.

The Legislative Assembly, the *corps législatif* set up under the constitution of 1791, met on October 1, 1791, unaware that its career would be short and stormy. It was imbued with a new spirit, the spirit of a nation in its third year of revolution and within six months of war. Among its members sat Carnot, the future architect of victory, the philosopher and mathematician Condorcet, and the surgeon Tenon. Most of the new deputies were lawyers, but among them were also 28 doctors. The Legislative Assembly was to have little time for social reform. It was convoked under ominous auspices. War threatened from without, and inside the country the opposition between the moderates and the radicals became more and more acute. Invasion, foreign war, the rising of August 10, the dethronement of the King, the September massacres—these are the events which characterize the problems faced by the Legislative Assembly. Compelled to devote its energy chiefly to a defense of the Revolution against internal and external foes, it was unable to transform into social reality the plan of assistance outlined by the Committee on Mendicity. Nonetheless, it gave some attention to this problem, took specific action as the occasion demanded, and developed a body of thought on the organization of public assistance, including medical care.

On October 13, 1791, Camus, the national archivist, reviewed for the

[41] J. M. Thompson: (editor): *French Revolution Documents 1789-94*, Oxford, Basil Blackwell, 1933, p. 113.

[42] Dreyfus, *op. cit.*, pp. 189-190.

Legislative Assembly the activities of the committees set up by the preceding Assembly, including those of the Health Committee and the Committee on Mendicity. The Health Committee (*comité de salubrité*) had been created by the Constituent Assembly on September 12, 1790, on a motion by Guillotin, and had been charged to look into all matters "relating to the art of healing and its teaching, to health establishments in city and country, such as hospitals, schools and the like, and in general to all subjects likely to be of interest for the public health." [42] Concerning itself with matters of professional practice and public health administration, it was consulted by the Committee on Mendicity on the provision of surgeons for rural areas. As part of the work of the Health Committee, Jean Gabriel Gallot, its secretary, in 1790 laid before the Constituent Assembly a plan for the complete reorganization of the medical system, as well as a plan for the erection of hospitals in the country.[44] Turning to the Committee on Mendicity, Camus reminded his audience that the Constituent Assembly had adjourned without acting on its proposals. Emphasizing the importance of the matter, he urged the deputies to take up and "to discharge the nation's debt to miserable and suffering humanity." [45]

The following day, on October 14, Tenon moved the creation of a new committee which would combine the areas of activity of the two earlier committees. After some discussion, the motion was adopted, and on October 27, 1791, the Committee of Public Assistance came into being. The name of the committee is worth noting as indicative of a change in public sentiment. The need for a coordinated program of public assistance was now an accepted axiom of public policy. Consisting of twenty-five members and eleven alternates, the Committee contained most of the twenty-eight physicians in the Assembly. Among them were Tenon, who became chairman of the Committee, Gastellier,[46] who received one of the two secretarial positions, and Bô, surgeon and apothecary, as well as one of the most radical members of the Mountain.[47] The Committee organized

[43] Bloch and Tuetey, *op. cit.*, p. XXIX.

[44] A. G. Chevalier: The Physicians in the Revolutionary Assemblies, *Ciba Symposia* 7: 245, 1946.

[45] Ferdinand Dreyfus: *L'Assistance sous la Législative et la Convention (1792-1795)*, Paris, 1905, p. 10.

[46] René Georges Gastellier (1741(?)-1821) did not play a prominent political rôle. He was so addicted to scientific polemics that his contemporaries called him "Guy Patin redivivus." His moderate political views almost brought him to the guillotine, and he was saved only by the fall of Robespierre. Chevalier, *op. cit.*, p. 247.

[47] Chevalier, *op. cit.*, p. 244.

itself into three sections concerned respectively with public assistance, health, and mendicity. From October 29, 1791, to September 19, 1792, it held 106 sessions.

At first sight, it might seem that the Committee's task was relatively simple. All it had to do was to discuss the reports and recommendations of the Committee on Mendicity and if these were found acceptable to submit them to the Assembly for a vote. *Aber die Verhältnisse die sind nicht so!* By the beginning of 1792, the Committee had not even begun its work. What was it doing during these two months? The answer is simple. It was fully occupied with specific requests and petitions for assistance. Created to study and to recommend legislative measures, the Committee soon found that through force of circumstances it was turning into an administrative agency concerned with proposals for action by the Legislative Assembly to relieve distressed individuals or localities.

Requests for relief came from all parts of the country, from individuals and from public officials, all calling attention to the distress of the poor, and to the calamitous position of the institutions intended for their relief, above all that of the hospitals. The reasons for the increasingly critical situation of the hospitals were known. Roland, Minister of the Interior, pointed them out to the Convention several months later. The hospitals, he said, " like all public establishments in France had delevoped in relation to a scheme of things which no longer exists in the present regime, that is to say, the obligations still exist but a part of the means of discharging them has vanished. The tithes and the feudal rights, so pernicious in themselves, were not exclusively the prey of the church and the nobles; they were also one of the main sources of income of the hospitals and colleges. . . ." [48] On November 2, 1789, the government had confiscated the property of the church and the religious orders, declaring euphemistically that " all church property is at the disposal (*disposition*) of the nation." [49] This decree also included hospital property. In support of this action it was argued that if the state takes over social services such as charity it can take as well the resources necessary to support them. Logically, therefore, the property of the secular hospitals could not long remain untouched, and in January, 1791, the Committee on Mendicity proposed its confiscation. The opposition was too powerful, however, and the measure was defeated. The defeat was temporary, however, for on July 11, 1794, all hospital property was taken over by the state.

[48] Bouchet, *op. cit.*, p. 285.
[49] J. M. Thompson: *The French Revolution*, Oxford, Basil Blackwell, 1944, p. 146.

The financial situation was further aggravated by increased demands for assistance.[50] Appeals for aid came from departments or municipalities suffering from the ravages of invasion or of natural calamities, such as floods or poor harvests. Individuals of all kinds who believed they had a claim on the beneficence of the nation appealed for assistance. The blind, the deaf-mute, the veteran crippled in the defense of the Revolution—all demanded relief. Public assistance began more and more to serve a dual purpose, to care for the needy and also to reward the patriot. (The latter purpose was to become increasingly prominent as the Republic fought for its life on many fronts.) The Committee examined all these appeals, decided what action to recommend, and then referred them to the appropriate executive department or agency. In large measure the report prepared by the Committee of Public Assistance for the Legislative Assembly was based on these petitions.

The report on the organization of public assistance was presented to the Assembly on June 13, 1792, by Bernard, deputy from the Yonne department. It was not received with any marked interest. The deputies were more concerned with other cares. This was the day on which the Brissotin ministry was dismissed. The Assembly and the people were preparing for a showdown with the King and his party. A week later the Tuileries were invaded by the "sovereign People." Involved with more pressing problems, the Legislative Assembly had no time to discuss Bernard's report. It was put on the shelf alongside that of the Committee on Mendicity.

What is the essence of Bernard's report? The ideas of Liancourt and his colleagues provided a point of departure for Bernard. This report, like that of the Committee on Mendicity, has as its *leitmotiv* a fundamental concept: the right of the indigent to public assistance. As Bernard clearly acknowledged, it derived from Rousseau's *contrat social*. "The object of the Revolution," he said, "is to protect those who have little against those who have much, the poor against the rich. It was made for the poor."[51] "The state owes each of its members security and protection; the property of the rich man and the existence of the poor man, which is his property, must receive equal protection as a public trust. Whence follows the principle still lacking in the Declaration of the Rights

[50] Raoul Mercier: *Le monde médical de Touraine sous la Révolution*, Tours, Arnault & Cie., 1936, pp. 300-374; Pauly Gargues: *Les hospices d'Angers: Précis historique et documentaire*, Angers, 1933, pp. 35-39; Dreyfus, *op. cit.*, pp. 16-19; Bouchet, *op. cit.*, pp. 286-287.

[51] Dreyfus, *op. cit.*, p. 25.

of Man, the principle worthy of being placed at the head of the Code of Humanity which you are going to issue: Every man is entitled to existence through work if he is able-bodied, through free assistance if he is unable to work." [52] The right to assistance is a counterpart of the obligation to work. Assistance at any age is therefore a compensation either for work performed or for work to be performed. Thus, aid either to the young or to the old, to the sick or the disabled, is no longer a matter of charity but a national obligation.

Based on these principles, medical care would be provided to the needy. Bernard was convinced of the superiority of domiciliary care and insisted on the danger and uselessness of increasing the number of hospitals. The plan of the Committee of Public Assistance, like that of its predecessor, ranged from the womb to the tomb.[53] Children would be protected even before birth. Trained midwives would be available in each canton to give free care to indigent expectant mothers. Not only foundlings would have a right to national assistance. Children of indigent parents would also be assisted. Efforts would be made to have foundlings adopted, preferably by childless couples. Pensions would be given to the aged, and they would be free to choose whether to remain with their families or to live in homes provided by the government. The sick poor would receive free medical attention at home from a health officer (*officier de santé*) serving the canton. This would suffice, in Bernard's opinion, for all indigents with homes and families. However, since many lacked any domicile, a certain number of "lazarettos" (*maladreries*) would have to be maintained in proportion to the population. Furthermore, it would be necessary to establish in each department a large hospital for special diseases, for major surgical operations, and for mental patients. Finally, the Committee felt that the prevention of indigency was an essential part of such a program. As one means to this end it suggested the extension of landownership, and proposed that the government assist rural laborers to become small proprietors. Another proposal was to encourage the formation of provident societies and savings establishments. Ideas of mutual aid societies were much in the air at this time. Condorcet advocated the organization of Assistance and Savings Societies (*Caisses de secours et d'accumulation*); [54] and a certain Marsillac proposed to replace hospitals

[52] *Ibid.*, p. 26.

[53] Bouchet, *op. cit.*, pp. 313-315.

[54] Léon Cahen: *Condorcet et la Révolution Française*, Paris, Felix Alcan, 1904, pp. 309-312.

by "civic societies, which would assure artisans of all physical or moral assistance in case of sickness or other human affliction." [55]

While the report of the Committee of Public Assistance was not discussed by the Legislative Assembly, its ideas were presented to the Convention several months later by Bô, one of its medical members, and helped to influence the action taken by that body in 1793. The Assembly did pass measures, however, which had serious consequences for hospitals and the provision of medical care. The Constituent Assembly in February 1790, had abolished the religious orders, except those devoted to nursing and teaching. Under the Legislative Assembly, relations between the revolutionary government and the religious orders worsened as part of the general religious crisis. By decrees of August 4 and 18, 1792, the religious orders were finally suppressed, although their members were asked to continue their work in the hospitals on an individual basis.[56] This action created a certain amount of confusion and disorder in the hospitals of the religious orders.

The situation was further confused by a decree of August 18, 1792, abolishing all "privileged associations," a category which included universities, medical schools, and scientific societies.[57] In this way the freedom of occupation proclaimed by the Revolution was to be secured. However, with the abolition of the teaching institutions and the disappearance of examinations, the quacks were given a free field. An act intended to remove discrimination and to enlarge the medical profession soon redounded to the great disadvantage both of the profession and the people it was supposed to benefit. This was the situation that faced the Convention.

IV.

On September 20, 1792, at Valmy in the Argonne, French revolutionary soldiers fought to a standstill the invading troops of Prussia and forced their withdrawal. Goethe, who was with the Duke of Brunswick, clearly grasped the significance of the Prussian reversal, when he wrote: "Here and today begins a new age in the history of the world. Some day you will be able to say—I was there." By one of those symbolic coincidences of history, it was on this day of victory that the National

[55] Dreyfus, *op. cit.*, p. 30.

[56] Bouchet, *op. cit.*, pp. 322-325.

[57] Chevalier, *op. cit.*, p. 247; Mercier, *op. cit.*, p. 40; A. Bordier: *La médecine à Grenoble: Notes pour servir à l'histoire de l'école de médecine et de pharmacie*, Grenoble, 1896, pp. 155-156.

Convention met to elect its officers. It was this body, the most radical of all the revolutionary assemblies, which abolished the monarchy, proclaimed the Republic, and executed Louis Capet. It was in the Convention and the government of revolutionary terror that the Republic concentrated all its energies and fought for its life. It was under the Convention that the Jacobins seized power and in a bitter internecine struggle established a dictatorship to save the state by overcoming foreign foes, internal anarchy, and civil war. It was the Convention that carried the revolutionary doctrines beyond the borders of France and left the Republic mistress of Belgium and Holland, at peace with Spain and Prussia, and a menace to Germany and Lombardy. And it was the Convention, which in the midst of the alarms of war and the turmoil of party strife, found the time to undertake the radical changes recommended by the Committee on Mendicity and the Committee of Public Assistance. It remained for the Convention to carry out the promise incorporated in the Constitution of '91 that all assistance would become a public service on a national footing.

The work of the Convention in the field of assistance was carried out through several bodies. Executive functions were divided among the Ministry of the Interior, the Committee of Public Assistance, and the Committee of Public Safety. The Committee of Public Assistance in the Convention was simply an extension of the committee of the same name in the preceding assembly. Originally set up on April 6, 1793, after the treachery of Dumouriez and the defeat of Nerwinden, the Committee of Public Safety passed through several phases before it finally became the organ of revolutionary government. On the 12 germinal, Year II (April 2, 1794), twelve executive commissions were created under the jurisdiction of the Committee of Public Safety. These were in essence departments of the Committee, and reported to certain of its members. The sixth of these commissions dealt with public assistance and was responsible to a group of three comprising Carnot, Prieur (of the Côte d'Or), and Lindet, who were charged with the organization of defense, control of commerce, agriculture and food, and internal administration.[58] As the role of the Committee of Public Safety increased in importance, that of the Committee of Public Assistance declined. The former made important executive decisions that were carried out by its sixth commission, while the latter was occupied with the theoretical discussion of general projects,

[58] Palmer, *op. cit.*, p. 307; Dreyfus, *op. cit.*, pp. 38-39; Marcel Reinhard: *Le Grand Carnot* (2 vols.), Paris, Hachette, 1950-1952, vol. II, p. 127.

technical aspects of administration, and the distribution of some minor forms of assistance. The Committee of Public Assistance also played a very important part in preparing the fundamental laws on assistance which were presented to the Convention by Bô and Barère.

The task which confronted the Convention in the midst of revolutionary turmoil was no simple one. It was not only a matter of creating a means of providing for the poor, the sick, the infirm, the unemployed, or any of the other classes of unfortunates who appealed to the government for aid. While the French troops fought to hurl back the foreign invader, what was to become of their families, of their wives and children if the state did not look after them? Thus, the trend initiated by the Legislative Assembly of employing assistance as a resource for the defense of the country became a policy under the Convention. Aid was given to the widows and orphans of soldiers, to the wounded and the maimed, and to invaded departments. As these obligations grew in magnitude and complexity, it was clear that a workable system of public assistance was essential, and this was accomplished by a series of laws passed in 1793 and 1794.

The fundamental basis of this legislation was laid down in the Constitution of 1793.[59] A constitutional committee had been set up by the Convention on September 29, 1792. Among its members were Danton, Barère, Condorcet, and Tom Paine. In reply to an invitation to "all friends of Liberty and Equality to present their plans and views," hundreds of communications were received. These amateur constitution makers all recognized public assistance as "a sacred debt of society." Carnot declared "that society should provide for the needs of those whose services it required; equally it owes assistance to those whom age or infirmity render unable to provide for themselves." In his *Project for a People's Constitution*, the deputy Poultier elaborated a complete plan of public assistance. Recognizing, he wrote, "the right of a citizen to existence and the security of his life, every citizen in a state of indigency will receive subsistance and support in proportion to his needs and services." Each department would have an establishment to provide aid to the aged, the disabled, and the orphan, work for the able-bodied poor, and medical care for the sick. Romme, a member of the Mountain, summed up the general principle underlying these projects and proposals in his statement that the Rights of Man are divided into political rights and social rights.

[59] For the Constitution of 1793 see Albert Mathiez: *Girondins et Montagnards*, Paris, Firmin-Didot et Cie., 1930, pp. 82-108.

The latter comprise "civil liberty, education, assistance, justice, public safety, and equality before the law." [60]

The draft of the new constitution based on the materials studied by the committee and prepared chiefly by Condorcet was presented to the Convention on February 15, 1793. As a preamble it contained a Declaration of the Rights of Man and the Citizen, which was discussed from April 17 to May 29, 1793. The debate was carried on in an atmosphere of increasing tension and hostility aroused by military reverses and by the bitter fight for power between Jacobin and Girondist. The social doctrine embodied in the constitutional draft entered into the power struggle of the parties. The Declaration of Rights prepared by Condorcet contained a statement that "public assistance is a sacred debt of society." For the Jacobins this formulation was inadequate, and they insisted on strengthening it. Oudot cried out: "The wealthy must cease to regard as generosity that which is a duty." More significant, however, were the principles expressed by Robespierre on April 24 in his speech on the limitations of property rights. "The right of property," he said, "is limited like all others by the obligation to respect the rights of others. It must not impair either the safety, or the liberty, or the existence, or the property of our fellowmen." [61] Following the defeat and expulsion from the Convention of the Girondist deputies, the Jacobins hurriedly redrafted the constitution to embody their principles. Introduced into the Convention on June 10, 1793, and adopted on June 24, its Article 21 states unequivocally: "Public assistance is a sacred debt. Society owes subsistance to unfortunate citizens, either by providing them with work, or by assuring the means of existence for those unable to work." [62]

Meanwhile, the legislative application of these principles had been initiated by a law passed on March 19, 1793, establishing a basis for a logically organized national system of social assistance.[63] All who needed assistance would receive it at state expense. Charity and begging were prohibited. Work relief would be provided for the able-bodied, while the infirm poor of whatever kind would receive assistance at home or in hospitals. The law also envisaged the creation of a national social insur-

[60] Dreyfus, *op. cit.*, pp. 55-57.

[61] Mathiez, *op. cit.*, pp. 94-95.

[62] J. M. Thompson (ed.): *French Revolution Documents 1789-94*, Oxford, Basil Blackwell, 1933, pp. 240-241.

[63] L. Cahen and R. Guyot: *L'Oeuvre législative de la Révolution*, Paris, Felix Alcan, 1931, pp. 434-436; Jacques Godechot: *Les Institutions de la France sous la Révolution et l'Empire*, Paris, Presses Universitaires, 1951, p. 379.

ance fund, based on voluntary contributions to be placed on the "altar of the nation" (*autel de la patrie*) on civic holidays. Offices of health would care for the poor receiving domiciliary assistance, for foundlings, and for the children of indigent parents.

Having set out the general scheme for a national system, the Convention proceeded to deal with special groups requiring assistance. A decree of June 28-July 8 provided for children, expectant mothers, and the aged. According to the first article of this law, "Fathers and mothers who have no other resource but the product of their labor have a claim to assistance by the nation whenever the result of their labor is inadequate for the needs of the family." [64] Large families were to be aided by granting allowances for every child after the second. Assistance to expectant mothers would begin with the sixth month of pregnancy. Unwed mothers, illegitimate children, and foundlings would have the same rights as other women and children. In each district, an institution, to be known as a *maternité* would be established for unwed mothers. If an unwed mother wished to nurse and keep her child, the state would provide financial assistance. Should such an arrangement be impossible or undesirable, the authorities would place the child with a wet-nurse or in an institution. All children supported by the state would have to be inoculated against smallpox. At the age of twelve, poor boys would be apprenticed at public expense. For the aged the law provided pensions and care at home or in an institution. Each district was to have a medical practitioner (officer of health), a midwife, and a store of medicaments.

Almost a year later, on the 22 floréal, Year II (May 11, 1794), the Convention passed another comprehensive law to assist the needy.[65] Its author was Barère who had been a member of the Committee on Mendicity. Prepared at the request of the Convention, it was intended to deal with other needs, financial and medical, of the poor.

This measure reflects the political and social circumstances out of which it grew. As the Jacobin dictatorship intensified its struggle against enemies on all sides, it was forced to lean for support more heavily on the masses of the towns and the countryside, *the true sansculottes*. For Saint-Just, as for Robespierre, society comprised two classes, "the good citizens, who are at the same time the poor, the Jacobins, the sansculottes, and the rich, the aristocrats, the corrupt." [66] In his important speech of

[64] Cahen and Guyot, *op. cit.*, p. 440.
[65] *Ibid.*, pp. 443-446.
[66] Dreyfus, *op. cit.*, p. 71.

19 vendémiaire (October 10, 1793), Saint-Just had indicated the line that Jacobin policy would take. "In a wisely ruled state," he said, "bread belongs to the people by right. . . ."[67] Then, on February 26, 1794, in presenting the first of the Laws of Ventôse, he went even further. "Abolish mendicity which dishonors a free state," he demanded of the Convention. "The property of patriots is sacred, but that of conspirators is at the disposal of the unfortunate, who are the masters of the earth. They have a right to dictate to governments that neglect their interests."[68] In this spirit the Jacobin government formulated its social policy, and appealed to the people. Price regulation by means of the law of the *maximum*, and the laws of Ventôse are aspects of this endeavor; Barère's law is still another.[69]

It dealt largely with pensions and medical care for the poor in country and town. Characteristic of its spirit is the statement that the words "alms" and "hospital" must be erased from the republican vocabulary.[70] There would be only domiciliary assistance in the country. Every department would draw up a Book of National Beneficence (*Livre de la bienfaisance nationale*) in which would be inscribed every tenth day (*décadi*) the names of needy agricultural laborers, artisans, and mothers and widows with children. Once a year in the capitol of each district there was to be held a festival of misfortune (*malheur*) at which the Book of Beneficence would be read aloud and the beneficiaries would receive their pensions. This festival would be dedicated to maternity and old age. As Barère saw the exalted scene with his mind's eye, he waxed eloquent. To the Convention, he said: "The two extremities of life will be united with the sex which is its source. Aged laborers and infirm artisans will be there, and beside them mothers and unfortunate widows with their children. This spectacle is the most beautiful one that politics can present to Nature and which a fertilized earth can offer to a consoling Heaven."[71] Each sick indigent was to receive 10 *sous* a day, and 6 *sous* for each dependent child. To obtain this support they would have to be inscribed in the Book of Beneficence. To care for the sick poor each district would have three medical practitioners. They would receive 1000 livres a year a

[67] *Oeuvres de Saint-Just, réprcsentant du peuple a la Convention Nationale*, Paris, Prevot, 1834, p. 173.

[68] *Ibid.*, p. 212; see also Albert Ollivier: *Saint-Just et la force des choses*, Paris, Gallimard, 1954, pp. 325-335.

[69] Mathiez, *op. cit.*, p. 129.

[70] Dreyfus, *op. cit.*, p. 73.

[71] *Ibid.*, p. 74.

piece, and would have at their disposal eight boxes of medicaments, valued at 30 livres, as well as a supply of rice, flour and potatoes.

Steps were taken to put the law into operation. Each district received a copy of the text, an explicatory circular, and a sample of the Book of National Beneficence. Application was incomplete, however, for the available resources were limited, and were more urgently needed to provide the sinews of war. Following the downfall of the Robespierrists in Thermidor, the Convention and then the Directory moved back to a modified version of the pre-revolutionary arrangements.

While the Convention endeavored to create a general body of law to implement the constitution of 1793, it also took action on specific problems. As already mentioned, on July 11, 1794, hospitals were taken over by the state, and the government assumed responsibility for hospital indebtedness and maintenance. Hospital property was sold and the proceeds were used for the needs of the government. Many of the older institutions were turned into military hospitals, and new ones were built for this purpose. In the third report of the Committee on Mendicity, Papion *le jeune* had emphasized the need for single beds and ample ventilation, and had pointed to the example of other countries. On November 15, 1793, the Convention passed a decree that every hospital patient should have his own bed, and that beds should be separated from each other by a distance of three feet. Just how effective this decree was cannot be determined. Nonetheless, it is interesting that in a booklet published in the Year II and addressed to the Convention, Souquet, physician to the military hospital at Boulogne, calls attention to the facts that the wards are well ventilated, that the beds are not surrounded by curtains and are clean in every respect.[72]

V.

The thought and action of the Convention represent the most advanced point attained by the French Revolution in dealing with social assistance inclusive of medical care. This is of more than passing interest to an age which has developed its social services to a high degree and which prides itself on this achievement. It is in the programs and laws of the revolutionary governments that the first outlines of these developments may be discerned. The French revolutionaries deserve credit on various counts. They embodied the fundamental right of man to existence in the

[72] Souquet: *Essai sur l'histoire topographique physico-médicinale du district de Boulogne-sur-Mer, Department du Pas-de-Calais*, Boulogne, Dolet, l'an deuxième de la République Française, p. 148.

basic law of the land. They endeavored to set up a national system of social assistance, inclusive of health care. Their emphasis on home care wherever possible was salutory and progressive in the light of hospital conditions at the time. Furthermore, they called attention to the need for assistance, inclusive of medical care, in neglected areas and for neglected groups in the population. They endeavored to see the problem of assistance as a whole. Finally, they developed ideas on public policy which were to influence France profoundly during the first half of the nineteenth century, and through her other countries. Ideas of public service, public interest, and social utility provided the seed-bed in which germinated new views on the relations between health, medicine, and society.[73] The men of '89 and '93 could not forsee the consequences that would stem from their thought and action. The triumph of the machine and the concentration of capital were still in the future, but it was in terms of the situation created by these developments that the men of '48 endeavored to apply the ideas of their predecessors. In this attempt they carried them foreward to a more advanced level. Medicine, a social science—the idea of '48—must be seen as the first fruit of this historical process, a process which has continued in a variety of circumstances to our own day.

[73] J. Bélin: *La logique d'une idée-force. L'idée d'utilité sociale pendant la Révolution Française, 1789-1792*, Paris, 1939; Leroy, *op. cit.*, pp. 318-324.

THE BRITISH MEDICAL COUNCIL AND BRITISH MEDICAL EDUCATION IN THE NINETEENTH CENTURY *

ANN BECK

The period between 1858 and 1886 has been called the Thirty Years' War for the reform of the system of British medical education. The war was fought in Parliament, in the press, and in the professional journals. After more than twenty bills had been introduced in Parliament and their discussions had reached violent stages at times, peace was established in 1886. It resulted in the compromise Medical Amendment Act which disappointed the idealistic reformers and the professional critics. But the war had not been fought in vain. Important issues had been raised. The constitution of the medical governing body had been revised. Basic standards for medical training and education had been laid down. And while purely medical issues were primarily discussed, related issues were given serious consideration, too. Among them were the state's right to interfere in medicine, the relationship between liberal and technical education, the apparent domination of vested corporate interests in the issuing of licenses, and the right of the public to secure equality of access to a profession which concerned the nation as a whole.

The movement for the reform of the Medical Council had begun immediately after the first Medical Act of 1858 had established a system of control over medical standards and practices by creating the British Medical Council as an agency of the Privy Council.[1] It is not surprising that dissatisfaction with the first comprehensive medical Act set in shortly after it had been enacted. There was no legislative tradition on which the lawmakers could rely. Public opinion had not yet been educated regarding medical administration and control. And the medical profession itself was, as far as its organization was concerned, in its infancy. The publication of the *Lancet*, in 1823, gave the medical profession a chance to

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[1] In the absence of uniform medical legislation Britain, formerly leading in medical learning and medical practice, as the *Edinburgh Review* wrote in 1845, was behind every other great European kingdom in the department of medical legislation. There existed legislation for separate bodies which was intended to protect only a portion of the profession or a locality. *Edinburgh Review*, 81, June-April 1845, "Medical Reform," p. 236.

express its interests as a group which led in 1832 to the establishment of the British Medical Association. Shortly afterwards, in the 1840's, it began to make its influence felt in Parliament. The Act of 1858 represented a forward step in the history of British medical administration in spite of all the shortcomings which required remedial action in the period under discussion here.

The unsatisfactory conditions which prevailed before 1858 could not be changed overnight. Yet it is significant that a change was desired. According to the general trends of the time the medical profession sought relief through Parliament just as the reformers in the field of public health had done earlier. In 1845 an editorial writer in the *Edinburgh Review* expressed generally acceptable views when he wrote that the medical profession "as a body possessing common interests, public privileges, and no mean influence on the welfare of society . . . [was] in a most unsatisfactory state, and much in need of that control which Parliament alone can extend." [2] Statistics corroborated the views of the critics. The medical directory of 1853 showed that out of 33,339 practising physicians only 11,808 were qualified whereas the remaining 21,531 were unqualified.[3] The writer in the *Edinburgh Review* was correct in complaining about the "unsatisfactory state" of medicine, since two out of three practising physicians before 1858 could not have qualified for licenses after that date. The great achievement of the Act of 1858 was the specification of licensing bodies and the setting up of a medical register by which, at least theoretically, the quality of practising physicians was subjected to the control of a central body. It did not take long, however, even for the conservative-minded administrator to discover the shortcomings of the Act. Criticism arose because of the inequality of the nineteen licensing bodies which had been set up in England, Scotland, and Ireland. Since they determined the selection of the candidates for the official register through separate examinations, their policies were of great concern to the public as a whole. Dissatisfaction arose because uniform standards of education were not enforced. Some of the licensing bodies were unwilling to adjust their methods to the rapid growth of science which required a flexible system of medical education. But the desire for reform could not be suppressed at a time when public health and the beginnings of the welfare state made problems of medical education and licensing a public concern of the entire nation.

[2] *Edinburgh Review*, 81, 1845, "Medical Reform," p. 235.

[3] Quoted from Ernest Muirhead Little, *History of the British Medical Association, 1832-1932*, London 1932, p. 5.

The Act of 1858 represented the first attempt at legal control of the medical profession as a whole. The organization of its governing body was deliberately loose and its powers too weak to protect the public from "licensed ignorance."[4] It did not dare to interfere with the very low standards of some of the corporations although it should have done so in the interest of the public.[5]

By 1868 responsible medical men had come to the conclusion that something had to be done. The Medical Council appointed an educational committee which was to make a systematic study of the prevailing conditions and draw up proposals for reform. In its report of 1869 it suggested most urgently the organization of conjoint boards to control the quality of examinations and the inclusion in the qualifying examinations of three subjects, namely general medicine, surgery and midwifery. The report of this committee became the basis of the first reform bill introduced in Parliament in 1870. Its principles reappeared with minor changes of emphasis in the successive sessions of Parliament between 1870 and 1886.

It is not the purpose of this paper to give the history of the bills which lingered unsuccessfully in Parliament. Instead, some of the issues of particular interest to the history of medicine will be discussed here in somewhat greater detail.

1. The Reorganization of the Medical Council

One item on the agenda for reform was the reorganization of the Medical Council whose deliberately weak powers of control had made it a symbol of good intentions rather than an effective executive agency of the central government. When the Council was created in 1858 the setting up of standards was in itself so revolutionary that the lawmakers had to be satisfied with an advisory body of control.[6] The enforcement of standards was therefore not possible during the first twenty years of

[4] Sir John Gray in House of Commons, March 30, 1870. *Hansard*, House of Commons, 200, col. 963, March 30, 1870.

[5] Sir John Gray told the following story to illustrate the army's dissatisfaction with licensed doctors. Although the army required two diplomas, one for medicine and one for surgery, less than 165 applicants had qualified during the last five or six years. "The Army Medical Board felt that if they gave such persons in charge of a patient, the next prescription would probably be an order for a coffin." *Ibid.*

[6] Dr. Acland told a Select Committee of Parliament in 1879 that under the Act of 1858 the powers of the Medical Council were "really very limited." *Lancet*, 1879, I, p. 895.

its existence. Dr. (later Sir Henry) Acland, the Council's president, stated before a Select Committee of Parliament in 1879 that in spite of its organizational weakness the Council had done a good job in its advisory capacity and as a source of information.[7] Witnesses before committees not connected with the Council thought otherwise. They regretted that the Council's power to recommend suspension to the Privy Council could be exercised only in very few cases and was actually never put in operation.[8] It was requested that the Council become independent of the institutions which it was to supervise and that it be given larger powers of positive control.

Under the old Act nineteen licensing bodies sent seventeen representatives out of a total of twenty-four to the Council. Since the ethical standards of some of the licensing corporations were not too high, improvements could be made only if their voice in the Council was balanced by a disinterested group. The British Medical Association and the *Lancet* therefore proposed that the medical profession be substantially represented on the reorganized Council.[9] But in spite of much writing and pamphleteering which had raised high hopes, the anti-climax came in 1886 when the new Act gave only five seats to the medical practitioners and hardly changed the Council membership otherwise. It seemed as though the independent corporations which had done "so much to make England a self-governing and prosperous country"[10] had gained another lease on life. The hope of the British Medical Association and the *Lancet* for *one* portal of entry to strict supervision was shattered.[11]

An increase in the controlling powers was also needed in order to enforce uniform minimum standards of examinations. The existing procedure was costly and ineffective. The Council's right to superintend the licensing

[7] In 1882 the report of the Royal Commission summarized its evaluation of the work of the General Medical Council as follows: "It is in our opinion clearly proved that the General Medical Council has rendered valuable services to the Profession and to the public. It is to the General Medical Council that the universal adoption of a preliminary examination for intending medical students is mainly due. The Council has also elaborated and published full and detailed recommendations, which have had a very beneficial influence upon the education and examinations of medical students." *Report of Royal Commission to Inquire into the Medical Acts*, Sessional Papers, 1882, XXIX, 497.

[8] Earl de Grey and Ripon in House of Lords stated that the power of recommending suspension had never been put into operation. *Hansard*, House of Lords, 201, May 5, 1870, col. 254.

[9] *Lancet*, 1870, I, 741-742.

[10] *Hansard*, House of Commons, 200, 1870, col. 262.

[11] *Lancet*, 1870, II, 748.

examinations merely gave it a chance to inquire into the standards maintained and to pass judgment, whereupon incompetence could be brought to the attention of the Privy Council. There was not one case in which the Council had interfered although it was known that many examinations were below the accepted standards. Council spokesmen pointed out that government interference was kept to a minimum to maintain the principles of freedom of individual action. The view was held and stated in Parliament that a man was entitled to the freedom of "trying to get cured in the way which best suited his own notions and that the public would not be brought by compulsion under the despotic rule of even so important a body as the Medical Profession." [12] If the trial and error method was not rejected then it was only logical to let selfish medical corporations license weak candidates. The assumption was that the competitive medical market would take care of the elimination of the less qualified physician. This assumption was based on the notion that the person in need of medical help, the customer, would be able to exercise his good judgment when he had to evaluate the quality of the medical treatment he received. Since control by the medical profession and control by the state were suspected as leading to the curtailment of a man's right to personal freedom, the final provisions of the Act of 1886 were disappointing. Inspectors were introduced as representatives of the Medical Council, but they could not actively participate in the examinations. They were permitted to report to the Medical Council which then passed their recommendations on to the Privy Council. If the latter was satisfied that minimum standards were not maintained it could withdraw an institution's right to issue licenses.

2. Proposed Reforms of the System of Licensing.

While the changes in the constitution of the Medical Council did not lead to substantial reforms in 1886, more progress was made in the revision of the system of licensing. The preamble of the Act of 1858 stated that its purpose was to enable "persons requiring medical aid to distinguish between qualified and unqualified medical practitioners." [13] In a special clause [14] the Act gave the Council the right to check on the

[12] Mr. Cowper Temper in House of Commons, *Hansard*, House of Commons, 244 1879, col. 765.

[13] Preamble of Act 1858 quoted in House of Commons by Sir John Grey, *Hansard*, House of Commons, 200, 1870, col. 962.

[14] Clause 20 of the Act assigned to the Medical Council the duty to check on the satisfactory completion of a certain course of study. After 1858 the Medical Council

successful completion of a certain course of study but it left the responsibility for the issuing of licenses to the nineteen licensing bodies.[15]

Between 1858 and 1886 the participants in the Thirty Years' War were busy interpreting the meaning and the purpose of licensing in many different ways. Some people had the notion that the public needed protection from "licensed ignorance."[16] Others found that licenses were to protect the profession from untrained interlopers. Thus a properly administered qualifying examination would serve the public and the medical profession. The bills introduced between 1870 and 1886 accepted at least one basic requirement. The qualifying examinations must include three subjects, instead of only one as under the old Act, namely midwifery, surgery, and internal medicine.[17]

Licenses were useful to the public and the medical profession primarily as a guarantee of minimum standards. Nineteen separate licensing bodies with different ideas on what constituted competence in medicine did not protect the public from "downward competition."[18] The legislators, educators, and physicians struggled over the definition of terms such as uniformity, sameness of knowledge, and standards. But agreement on terms could not bring about agreement on policies. Even if the curriculum for medical students were exactly the same, the leniency of some licensing bodies made it impossible to achieve uniformity of standards. Dr. Lyon Playfair, scientist, public servant, and representative of the Scottish universities, could not free himself entirely from political considerations when he defended the advantages of regional differences. He expressed it poetic-

interpreted this clause as giving it the responsibility for a good and general education of medical students.

[15] The Royal Commission Report of 1882 emphasized the problems faced by the lawmakers in 1858. It said, for instance, "The Act of 1858 would appear to have been passed rather in the interests of the Medical Profession. Parliament was not prepared to enact that registered persons alone should practise medicine or surgery, but it seems to have been assumed that, if a statutory distinction were drawn between registered and unregistered practitioners the public would know how to protect itself against unqualified persons. At the same time, the importance of obtaining the concurrence of the Universities and Medical Corporations made it impossible then to do more than to require that their examinations should be subject to supervision of a central authority, appointed to the extent of two thirds of themselves, and not having any direct control over them but only a power of representing their shortcomings to the Privy Council." *Report of Royal Commission to Inquire into the Medical Acts*, Sessional Papers, 1882, XXIX, 494.

[16] See above, p. 152.

[17] The scope of medical education is discussed in section 3 below.

[18] *Hansard*, House of Commons, 200, 1870, col. 968.

ally saying that " just as ships must adapt themselves to the character of the harbour into which they are to sail, so must schools suit their students to the knowledge and peculiarities of their examiners." [19] He believed that a uniform standard of knowledge did not mean the sameness of knowledge since allowance must be made for a " respectable mediocrity " as well as for excellence of performance in examinations.[20] Only the incompetent candidates were to be eliminated. There were others from Oxford University and from the London Colleges of Physicians and Surgeons who believed in very high minimum standards which they wanted to see uniformly enforced.[21] Others feared that a high minimum standard would eliminate too many candidates at a time when Britain was in need of more physicians. They cited the population increase during the decade 1861 to 1871 as 13.2 per cent while the increase of doctors amounted to only 1.9 per cent.[22] And finally the spokesmen for the corporations which lived from the business of licensing thought in terms of income rather than quality when they discussed licenses.[23] The worst offenders were the Scottish corporations, not to be confused with the excellent Scottish universities. The College of Physicians and Surgeons in Glasgow passed men who had failed their examinations in English universities and corporations. After the required three-months waiting period they transferred to Scotland and passed without further study.[24] It all depended upon one's point of view whether one condemned such methods or tried to justify them. Dr. Thomas Cooke explained the Scottish practice in the following way. The Scottish examinations were not necessarily of an unacceptable quality. They allowed the candidate plenty of time to show what he really knew. They were fitted for the average student whereas the London examinations required a " showy knowledge," a knowledge of little points. Only the brilliant and the sharp men could pass them.[25] But in spite of such interpretations the inequality of examinations must be admitted by all. The bill of 1886 stated that the qualifying examinations must include medicine, surgery and midwifery. Licenses could be issued

[19] *Hansard*, House of Commons, 207, 1871, col. 42.

[20] Playfair expressed this view in 1871 and held it still in 1886.

[21] Sir James Paget stated before the Royal Commission of Inquiry in 1882 that the standards of the London College of Surgeons were too high. At a recent examination 60 candidates out of a total of 140 were rejected. *Lancet*, 1882, II, p. 506.

[22] *Lancet*, 1879, I, p. 899.

[23] *Ibid.*, 1181, II, p. 721.

[24] *Ibid.*, 1882, II, p. 506.

[25] *Ibid.*, p. 547.

by twenty universities and corporations. The joint boards of examinations were optional although their formation was encouraged. The maintenance of standards of proficiency was entrusted to the General Medical Council which appointed inspectors with advisory functions. According to the Act of 1886 it was a policy-making as well as a remedial body. Action on the withdrawal of licenses could be taken by the Privy Council after recommendation by the General Medical Council. The bill of 1886 represented a compromise between the advocates of high quality and the defenders of mediocrity. The medical profession, however, took matters in its own hand and pushed the formation of joint boards of examination. By the end of the nineteenth century medical standards were higher than in 1858 in spite of the corporate vested interests.

3. Changes in Medical Education between 1858 and 1886.

One of the basic issues of the campaign for the amendment of the Medical Act of 1858 was the improvement of medical education. The best guarantee for a satisfactory system of licensing was the raising of the quality of medical education. Ever since the Renaissance additions to the medical curricula had been made. But up to 1858 medical studies were carried on in an unsystematic way.[26] The trouble was that even then the curricula were only recommended and not obligatory. The Englishmen of the nineteenth century dreaded the word "uniformity." In testimony before the Select Committee of Parliament in 1879, for instance, Acland testified in answer to a question by Dr. Cameron "that it would be an extremely unfortunate thing if any action were taken by the Legislature or the Medical Council to force education in connection with medicine into one uniform system. The courses of education should be as free as possible, the opportunities of study should be as complete as possible in the several departments and the country might see that the pass examination was tolerably uniform throughout the whole kingdom."[27] But did not the president of the Medical Council confuse academic freedom with the setting up of a standard curriculum? Granted that the methods of teaching were not to be regulated by the Council, there still remained the necessity of agreement on whether the candidates of medicine were to have a good general education before proceeding to further theoretical and practical training in medicine proper. There was no guarantee, after 1858, that candidates had been sufficiently "exposed" to the "cultural" courses

[26] Sir George Newman, *The Building of a Nation's Health*, p. 48.
[27] *Lancet*, 1879, I, p. 928.

since they could pass their final examination either with a corporation or a university and it was only in the latter that a basic general education was acquired. In this respect Acland had more outspoken views but he did not impose them upon his colleagues on the Council.

From a broader historical perspective it is interesting to note some of the ideas on education expressed in the Parliamentary Debates, before the Select Committees of Parliament, and before the Royal Commission in 1882 as well as in the editorial pages of the *Lancet*. It was seen that the "instrumentation of the mind rather than the mere knowledge of facts . . . made a great physician." [28] It was noticed that in classes attended by university men and non-university men the difference between the two was "almost impossible to describe." [29] And it was believed that general education attracted a better class of candidates into the profession. The Royal Commission recommended in 1882 that every intending medical student ought to pass an examination in general education before entering on medical studies in order to make sure that he possessed a reasonable amount of general culture.[30] In addition to these general cultural subjects intensive studies in physics, chemistry, botany, zoology were suggested.[31] In an age which still believed that progress could primarily be achieved by perfecting the practical methods of overpowering nature such opinions strike us as modern.

But the emphasis on the theoretical and cultural background must not make us believe that the practical training of the candidates was neglected. The bill aimed also at additional practical training. Gibes were often made at the uselessness of "mere" booklearning. The Marquess of Salisbury said, for instance, in the House of Lords in 1870 that he feared the new bill might destroy the independent schools of medicine. He personally would not want to have his leg cut off by someone who had "read about cutting off legs." [32] Such an attack on booklearning was unnecessary since

[28] *Hansard*, House of Commons, 200, 1870, col. 38.

[29] *Lancet*, 1870, I, p. 661.

[30] *Report of Royal Commission on Grant of Medical Degrees*, 1882, XXIX, p. xi. One may be inclined to doubt the effectiveness of the recommendations of the Royal Commission if one follows the recent discussion on illiteracy in medical examinations in the *Manchester Guardian* of October 13, 20 and 27. The dean of the Westminster Medical School had complained that candidates though quite good in science papers showed a standard "bordering on illiteracy" in the English papers. The editorial commented that improvement could not be expected unless the examiners themselves took the English papers seriously enough to reject the applicants because of illiteracy.

[31] *Lancet*, 1881, I, p. 61.

[32] *Hansard*, House of Lords, 201, 1870, col. 262.

the new bill aimed at the broadening of medical education in every respect. A reorientation of the educational philosophy in medicine had become imperative for two reasons. The progress made in science required a frequent revision of the technical and scientific subjects taught. Research in science and interpretation of the new findings could not be made by men who had been trained as technicians of medicine. Unfortunately the bill of 1886 did not incorporate the findings of the painstaking analyses of the experts and politicians who had expressed their ideas on medical education. It merely enlarged the curriculum and gave the General Medical Council the power to secure and maintain standards of proficiency.

Had the Thirty Years' War for the improvement of medical standards been in vain? The bill of 1886 was an anti-climax [33] but it maintained the principle of government interference in medical administration and education in order to protect the public. In this respect it followed the nineteenth century trend in England which allowed the state to set minimum standards of sanitation in 1871 and 1872. When the "prescriptive right to be dirty" began to be replaced by the duty of the state to protect the health of every citizen throughout England, steps had necessarily to be undertaken to protect the public from the "downward competition" of irresponsible and independent licensing bodies.

APPENDIX

Quoted below are those sections of the Medical Acts of 1858 and 1886 which are discussed in this paper. The quotations are taken from *The Complete Statutes of England*, Halsbury Statutes of England, London, Butterworth, 1930, vol. XI, pp. 671, 672, and 715.

Section 15 of the Act of 1858 mentions briefly the "evidence" on the basis of which medical licenses were to be conferred without laying down a set of strict rules. Section 15 reads in part:

15. *Registration of persons now qualified, and of persons hereafter becoming qualified.*

Every person now possessed and . . . every other person hereafter possessed of any one or more of the qualifications described in schedule (A)[34] to this Act, shall on payment of a fee not exceeding two pounds in respect of qualifications obtained on or after that day, be entitled to be registered on producing to the

[33] The climax had been reached during the discussion of the bill. Hopes for far-reaching changes had been held.

[34] Schedule merely lists the universities and corporations entitled to hold licensing examinations.

registrar of the branch Council for England, Scotland, or Ireland, the document conferring or evidencing the qualification or each of the qualifications in respect whereof he seeks to be registered. . . . (p. 671)

Notice the permissive character of section 18:

18. *Council to be informed as to course of study, etc. required for obtaining qualifications.*

The several colleges and bodies in the United Kingdom . . . shall from time to time, when required by the general council, furnish such council with such information as they may require as to the courses of study and examinations to be gone through in order to obtain the respective qualifications mentioned . . . , and the ages at which such courses of study and examination are required to be gone through, and such qualifications are conferred, and generally as to the requisites for obtaining such qualifications; and any member or members of the general council or any person or persons deputed for the purpose by such council, or by any branch council, may attend and be present at any such examinations." (p. 672)

The right to control the Medical Council was given to the Privy Council under sections 20 and 21. But during the period 1858 to 1886 the Privy Council did not exercise the right which it had under the Act. See footnote 8.

20. *Defects in the course of study or examinations may be represented by general council to Privy Council.*

In case it appear to the general council that the course of study and examinations to be gone through in order to obtain any such qualifications from any such college or body are not such as to secure the possession by persons obtaining such qualification of the requisite knowledge and skill for the efficient practice of their profession, it shall be lawful for such general council to represent the same to her Majesty's Most Honourable Privy Council. (p. 672)

21. *Privy Council may suspend the right of registration in respect of qualification granted by college, etc. in default.*

It shall be lawful for the Privy Council "upon any such representation as aforesaid, if it see fit, to order that any qualification granted by such college body, after such time as may be mentioned in the order, shall not confer any right to be registered under this Act. . . ." (p. 672)

The new Act of 1886 devoted sections 2, 3, 4, and 5 to the nature and methods of the qualifying examinations.

2. *Examination before registration.*

On and after the appointed day a person shall not be registered under the Medical Acts in respect of any qualification referred to in any of those Acts, unless he has passed such qualifying examination in medicine, surgery, and midwifery, as in this Act mentioned. (p. 715)

3. *Qualifying examinations held by medical authorities.*

1. A qualifying examination shall be one in medicine, surgery, and midwifery held, for the purpose of granting a diploma or diplomas conferring the right of registration under the Medical Acts, by any of the following bodies, that is:

a) Any university in the United Kingdom or any medical corporation, legally qualified at the passing of this Act to grant such diploma or diplomas in respect of medicine and surgery; or

b) Any combination of two or more medical corporations in the same part of the United Kingdom who may agree to hold a joint examination in medicine, surgery, and midwifery, and of whom at least one is capable of granting such diploma as aforesaid in respect of medicine, and one at least is capable of granting such diploma in respect of surgery; or

c) Any combination of any university as aforesaid with any other such university or universities, or of any such university or universities with a medical corporation or corporations. . . .

2. The standard of proficiency required from candidates at the said qualifying examinations shall be such as sufficiently to guarantee the possession of knowledge and skill requisite for the efficient practice of medicine, surgery, and midwifery; and it shall be the duty of the General Council to secure the maintenance of such standard of proficiency as aforesaid; and for that purpose such number of inspectors as may be determined by the General Council shall be appointed by the General Council, and shall attend, as the General Council may direct, at all or any of the qualifying examinations held by any of the bodies aforesaid.

3. Inspectors of examinations appointed under this section shall not interfere with the conduct of any examination, but it shall be their duty to report to the General Council their opinion as to the sufficiency or insufficiency of every examination which they attend, and any other matters in relation to such examination which the General Council may require them to report; and the General Council shall forward a copy of every such report to the body or to each of the bodies which held the examination . . . and shall also forward a copy of such report, together with any observations thereon made by the said body or bodies, to the Privy Council. (p. 715)

Section 4 stated that the Privy Council "if they see fit" . . . "may by order declare that the examinations of any such body or bodies shall not be deemed to be qualifying examinations for the purpose of registration under the Medical Acts. . . ." (p. 715)

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PHILOSOPHICAL PRESUPPOSITIONS OF PRESENT-DAY MEDICINE *

WALTHER RIESE

Philosophy and Medicine

Ever since it was taught in the medieval universities, philosophy has included the three branches of *natural*, *moral*, and *metaphysical* philosophy, commonly called the three philosophies.[1] Medicine never severed its ties with moral philosophy. In our time we witness a powerful revival of medical ethics and an imperative need felt by the young generation for the formulation of first principles presiding over the conduct which the physician should adopt in the ever more complicated and involved situations implied in his profession today. The relation of medicine to the other branches of philosophy is a less continuous and a much more dramatic and disturbing story. It is safe to say that the whole problem of the interrelation of medicine and philosophy is being rediscussed today in wide circles.

In his analysis of the advancement of learning (book II), Bacon shifted medicine to philosophy: ". . . the science of medicine, if it be destituted and forsaken by natural philosophy, . . . is not much better than an empirical practice." More specifically, Bacon classified medicine with that section of philosophy which he called human philosophy or humanity, i. e. the knowledge of man, a division of equal rank with the other sections of philosophy (natural religion and natural philosophy). Bacon's analysis of the divided state of man led him to the distinction of man's body and man's mind; medicine or the art of cure was listed by him as a knowledge concerned with man's body. The classification of human knowledge offered by the famous *Encyclopédie, on Dictionnaire Raisonné Des Sciences, Des Arts et Des Métiers* (Genève 1777-1779, tome premier, p. 84), was based on the same principles as Bacon's analysis of the advancement of learning. Medicine reappeared in the *Encyclopédie* as a section of philosophy, though it was no longer grouped with the other divisions (morals and logic) constituting the science of man but, (to my knowledge) for the first time, with the natural sciences. This was a most fateful step in the history of medicine.

* Read at the twenty-eighth annual meeting of the American Association of the History of Medicine, Detroit, Michigan, May 13, 1955.

[1] See: *New English Dictionary*, 1909; vol. VII.

During the nineteenth century an ever-increasing estrangement of medicine from philosophy took place until a state of complete isolation was reached at the turn of our century. Medicine was condemned to share the fate of natural history. In fact, the following statement made by Lamarck, one of the most eminent naturalists of the early nineteenth century, could have been made by a nineteenth-century physician:

> Our knowledge of *natural history* is positive throughout; it is everywhere concerned with known things and facts, ascertained by observation. The philosophy of science alone is exposed to the influence of our errors of judgment.[2]

So strong remained the faith in "known things and facts," that Claude Bernard, a late-comer to the era of positive knowledge and himself a medical philosopher of highest rank, could declare:

> philosophy does not teach anything, and it is unable to teach anything by itself since philosophy makes neither experiments nor observations.[3]

The final shift of medicine from a branch of philosophy to a branch of natural history implied the shift from one major source of human knowledge to another, fundamentally different one, namely from reasoning to memory, or from reflexion on facts to their simple enumeration. After this shifting, medical teaching and medical practice have inevitably become more indebted to man's memory than to man's reason. Perhaps as never before in medical history, are successful training and consummate experience today tested by the immediate availability of material remembered if not memorized, rather than by an insight into the laws of nature and the dynamics of the living organism in health and disease. Even the experimental method, though originally intended to secure this insight by reproducing natural phenomena under identical conditions, has been used and exploited all too frequently for the purpose of increasing the number of facts instead of explanatory principles. Numbers of articles and treatises convey to the contemporary reader endowed with the best will the impression that observational and experimental data are collected for their own sake rather than for serving as preparatory steps or raw material for the interpretation and understanding of vital phenomena.

Anamnesis

At an early stage of medical thought and medical history diseases emerge as instantaneous afflictions. Ever since this interpretation has been

[2] *The Lamarck Manuscripts at Harvard*. Edited by William Morton Wheeler and Thomas Barbour. Cambridge, Massachusetts, Harvard University Press, 1933, p. 194.

[3] *Lettres Beaujolaises*, Villefranche-en-Beaujolais, Editions du Cuvier, 1950, p. 227.

dismissed and diseases have become the end results of a sequence of natural processes, the clinical history has been given the rank of the first if not the most important step in the hierarchy of those thoughts and actions whose ultimate goal is therapy. We expect the clinical history to submit to the criteria of history at large, which we understand to be a coherent sequence of events. To my knowledge, Galen was the first who realized the fundamental difference between a simple and gratuitous accumulation of more or less unrelated facts and a logically consistent whole in which the patient's own statements and experiences are of paramount importance. It is due only to this logical consistency that we can trace the natural history of diseases, which has repeatedly been believed to be the primary object of clinical investigation. Here is a juncture between clinical history and diagnosis, based on the implied knowledge of a natural history of diseases that are to be named and classified. Again, it was Galen who wrote in his *De locis affectis* (II, 9) that all statements on pain and suffering remain a long and empty chat, should the patient's own observations not pave the road to diagnosis.

There can be no doubt that the procedure by which the physician tries to secure from the patient the informative material needed for the construction of the clinical history is undergoing a profound change in our time. This change is embodied in the shift from interrogation to interview. While in interrogation one person is questioned by another person whose own experiences, past and present, are not at stake, there is implied in interview a wider meaning, namely that of a mutual view or examination, though, as I learned, this meaning is becoming obsolete. Be that as it may, the interrelation of the interviewing physician and the interviewed patient is now emerging as a new and complicating factor in the first area of medical action, that of taking the clinical history.

Physician and Patient

While the technical aspect of the interrelation between physician and patient culminates in the delivery of a case history or anamnesis by the patient, the moral relation finds its expression mainly in the obligation, logically extended to the situation of the interviewer, to obey certain rules of conduct. Both types of relation can be traced back to antiquity. It was left to modern psychiatry to give to the interrelation of physician and patient its psychological form, and transference thus emerged as the first scheme of this new type of interrelation. There remained the task to discover and to use the reciprocity of both partners involved, physician and

develop a thesis, enunciated for the first time by Kant in the preface to his " First principles of natural science " (*Metaphysische Anfangsgruende der Naturwissenschaft*), namely that a person is bound to change his behavior by the very fact of being observed by another person. It seems that modern physicists, adopting the " operational " view, were not aware of their philosophical forerunner. Nor did the modern physician remember Pinel's warning, pronounced in the preface to his medico-philosophical treatise on mental alienation (1809), that it would be unskilful to display an open interest in observing the patient and exhibiting his secret thought. patient alike. In this respect contemporary psychiatry did no more than It is very fortunate and a sign of great insight into the general nature of the problem involved, that a contemporary psychiatrist, Will, has linked the psychotherapeutic process and the psychiatric interview, which he has declared a segment of that process, with the operational view or the field of living of the patient. Credit for the introduction of this view into psychiatry must go to Sullivan in whose thinking, to quote Will once again, ". . . there is no situation in which the interviewer is a ' neutral ' figure in the therapeutic field; he is inevitably a participant, and the field of social action is altered by his presence. . . ." [4]

The whole interpersonal approach calls for a reformulation of the rôle and position of the physician in medicine at large. The medical historian is challenged by some anticipations to be found in Hippocratic medicine. From certain passages of the Hippocratic collection the physician emerges not as a kind of self-sufficient director of treatment, but as an associate of the patient.

> The art consists in three things—the disease, the patient, and the physician. The physician is the servant of the art, and the patient must combat the disease along with the physician. (*Epidemics* I.)

Herein is implied the physician's unavoidable involvement in a process no longer following a one-way direction but assuming reciprocal ways of influence. Sullivan gave to this reciprocity its specific and timely expression. The physician finally emerged as a person, himself in need of assistance. " The *interviewer* communicates—by tonal gestures, or by the pattern of his remarks, or both, which is usually the case—*his own* need for reassurance." [5]

Thus seems to be reversed or at least questioned the age-old aristo-

[4] H. S. Sullivan: *The Psychiatric Interview.* Edited by H. S. Perry and M. L. Gawel with an introduction by O. A. Will. W. W. Norton & Co., Inc., New York, 1954, p. xx

[5] *L. c.*, p. 130.

cratic position of the physician as the distributor of health, and the minor rôle of the patient as the sole carrier of disease. Should it be true, as Plato said, that the best physician would be the one who himself passed through the experience of disease? Should we have to give credit to Burrow's thesis,[6] according to which the contemporary physician himself has to be included in the vast category of neurotics who make up modern mankind at large, this social neurosis originating from interhuman relations, distorted from the very onset, due to man's greatest gift, i. e. language, condemning him at the same time to substitute symbols, abstractions, and dangerous fictions for true and natural values?

Diagnosis and Therapy

The major epistemological problem raised by diagnosis is implied in the constituents of this mental procedure and the interrelation of these constituents. The names of diseases, their diagnoses and classifications are correlative terms. The constituents of diagnosis recur as the criteria of subdivisions in our classificatory schemes. The variants or subgroups of a given disease result from differences in etiology, and those of the sites and natures of lesions. There is detectable in medical history an unmistakable increase in those basic sciences which provide for the constituents of diagnosis. Etiology or the knowledge of causes emerged as the oldest constituent of diagnosis; it was succeeded by the anatomical constituent, succeeded in its turn by the pathological. Modern medicine has become increasingly biochemical, but it was left to our era to add to the iatrophysical and iatrochemical constituents an iatroatomic one. There can be no doubt that through this whole process diagnosis has gained in fullness and width and that diagnosis has become increasingly multidimensional. At the same time, however, diagnosis has become increasingly ambiguous. Which of the constituents should be given the highest rank in the hierarchy? Is a given disease characterized by the structures involved, and thus by regional, i.e. anatomical criteria? Should diagnosis draw its main source from the nature of the lesions with which a given disease is found to be associated, i. e., from pathology? The organization of the medical profession according to specialities still bears the mark of anatomical criteria of diagnosis and classification. The public is trained to turn to that physician whose designation and qualifications refer to a

[6] *Science and Man's Behavior*. The Contribution of Phylobiology. Edited by William E. Galt, including the complete text of "The Neurosis of Man." Philosophical Library, New York, 1953.

given organ or, at best, a system of organs. But all too frequently the precarious nature of this criterion comes to the fore, and in states of perplexity, which are the rule rather than the exception, the patient may be shifted from the first specialist to a number of others, each of them claiming (but also limiting) his competence to an organ of his choice. It seems that nature does not always comply with the requirements and results of medical training and the principles of organization of our profession. The difficulties outlined result from the fact that we have no criteria admitting of an objective evaluation of the relative importance of each of the constituents of diagnosis. Such an evaluation would presuppose a factor common to all of the constituents to be compared with one another. But what could be the factor common to regional, pathological, etiological, and experimental diagnosis? These are heterogeneous facts and ideas which therefore can hardly be put on a common denominator. The physician trying to reach a diagnosis must realize that it is quite arbitrary to give preference to the anatomical, or the pathological, or any other constituent of his diagnosis, or principle of classification. He remains on firm ground only as long as he adopts the most general and the least prejudiced criterion of disease, namely that of a chapter in an individual's life history or, more specifically, that of a state of suffering associated with disturbed function. Neither the structure of any diagnosis nor the principle of any classification should ever deny this criterion which is thoroughly clinical. The criteria embodied in the basic sciences may then be admitted as secondary ones, always open to change in order but never allowed to compete with the supreme principle of disease as disturbed life.

An example may illustrate the diagnostic rules here offered. The diagnostician would begin with the statement that in a given case one of the basic functions of animal or human life, e. g. voluntary movement, is disordered. He would then proceed to localize the level of the nervous system involved in the type and scope of the paralysis encountered, next would come the tentative impression of the pathological nature of the lesion, and finally, the presumable etiology. I submit that the mental procedure here outlined is more fitting for the dignity and greatness of human intelligence than any diagnosis ready-made by automatic routine and rote, though the latter too may serve purposes of their own. Only by adopting this hierarchy of principles of diagnosis and classification would the march of reasoning reflect the march of time and history in which, in contrast to our present-day schedule, the clinical criteria preceded those springing from the basic sciences. In fact, at first the clinical criteria

emerged simply as criteria of disease at large; only many centuries later were they made the criteria of diagnosis. The epistemological problems which the contemporary physician faces in therapy are not basically different from those in diagnosis. What is at stake here, is the changing picture of disease. In a sense, the effect of therapy leads to a new diagnosis; this is the reason why the most eminent clinicians of the past wanted to see previous treatments listed as factors in the history of diseases. The various therapeutic procedures in use can be traced back to as many attempts to modify one or more of the constituents of the picture of a given disease, each of these constituents again owing its existence to one or more of the basic sciences. Thus, one can treat a disease by trying to reach the *structures involved,* if not by involving intentionally new structures, as in shock therapy, frontal lobotomy, or other neurosurgical interventions, all of them models of treatment conceived on neuroanatomical grounds. Therapeutic procedures may aim at the modification, but also the curative production of *pathological conditions* or lesions. Credit must be given to B. Aschner for having recalled and recovered from the therapeutic treasure of the past those procedures and drugs through which artificial hemorrhages, inflammations, abscesses, and other lesions were produced profusely. The opinion that a second disease may have a favorable effect on the basic condition never did pass out of existence, and the Viennese psychiatrist, Wagner von Jauregg, was awarded the Nobel prize for the successful inoculation of the *Plasmodium malariae* to the general paretic. Obviously, this type of treatment aims at the *etiological* constituent of disease. But just as in diagnosis the highest rank in the hierarchy of the constituents must be left to the disturbed function, the therapeutic procedure which aims at the modification or reversal of the physio-pathological mechanism involved can justly claim the supreme position in the hierarchy of treatments designed according to the contributions made by the basic sciences to our present-day conception of disease and structure of diagnosis. Again, this epistemological order of treatments reflects the historical order and the early though still crude and speculative elaboration of indications in Graeco-Roman medicine, particularly in the teaching of the dogmatists. But this order also does justice to the most refined and most recent stage of experimental therapeutics, so significant of modern medicine.

Prognosis

Of all basic medical thoughts prognosis is the one least cultivated by contemporary physicians. The passage from Greek medicine to modern

medicine has indeed been interpreted as that from a healing art, cultivating prognosis as its major theme, to one emphasizing diagnosis with its manifold procedures designed by anatomical and physiological knowledge. In this respect it is significant that in contrast to the art of identifying diseases, that is of diagnosis, the art of forecasting their outcomes rests today on the same principles as in Hippocratic medicine. "One must judge of children as of others, which will die and which recover, from the whole of symptoms. . . ." we read in *Prognostics*. Just as his Greek forerunner, the contemporary physician foretelling the future takes the diseased individual *en bloc* or globally, relying in his prognostications much more on the whole of the clinical picture than on diagnosis. Even in malignancies he wants to leave room for an unexpected turn for the better, and the physician who meets his patient in the street, months after he predicted his imminent death, remains a feature in literature and caricature. The authors of the various editions of the *Code* or *Principles of Ethics of the American Medical Association* deemed it necessary to convey to the reader the unqualified warning that "the physician should neither exaggerate nor minimize the gravity of a patient's condition." Austin Flint, who in 1883 commented on the *Code*, considered it a mild expression in Article 1, Section 4 of the Code, "to say that gloomy prognostications made in order to magnify the importance of medical services savor of empiricism." "Whenever made with that intent," he concluded, "they denote nothing less than downright charlatanry." But he left it open that "forwardness in gloomy prognostications may proceed from a mental tendency thereto." "Some minds," he said, "are so constituted that there is a constant disposition to look on the dark side and anticipate the worst."

In other words, the prognosticating physician remained relatively unimpressed by the contributions made in the march of time by the basic sciences to the conception of disease, diagnosis, and classification. It is tempting to recall the view of an eminent French medical historian (Daremberg) according to whom prognosis emerged in antiquity as a child of prophecy. It is indeed from the whole of circumstances or the total design of a human existence and not from fragments that prophecy draws its sources.

Recovery

In modern medicine there seems but little room left for spontaneous recovery. The idea of a healing power of nature, once cherished by generations of physicians, has become obsolete. The life of modern man does not allow of an expectant treatment. Modern man, pushed from all sides,

professional and private, into a heated competition and living in a state of permanent insecurity and anxiety, wants to be treated as fast as possible with a minimum loss of working hours and income. Still, we are taught that certain diseases need years, if not the whole life, to develop; the intention and the promise to undo this development and to cure by a limited number of convulsive states, let us say, must lead to confusion. But so strong is the tendency towards rapid cure that man is ready as never before to give up his most precious and most human endowment, i. e., his consciousness, to pass into coma and to sacrifice his physical integrity, provided he is given the hope to find relief from pain and melancholy. The physician may not realize that he is not always free in his therapeutic devices, and the public may not know that it is putting heavy demands on the physician's selection of treatments which we like to consider as purely biological in origin and design. I submit that there is always a mutual indebtedness of public and physician.

To conclude, at least in some areas of medical practice modern treatment has become unusually active, if not aggressive, recalling the bygone days of so-called heroic treatments. But since favorable, at times even spectacular, effects are reported by various and numerous sources, an effort must be undertaken to submit to the test of medical thought the recovery resulting from a type of therapy significant of our time in more than one respect. It has been rewarding and uplifting to discover that this analysis leads to a definition of the criteria of recovery at large. It would not seem logical to expect the favorable or inhibiting influence exerted by injury or an artificially produced second disease from the negative symptoms, i. e., the functional deficiencies, or still less, from the lesions associated with diseases. To quote Hughlings Jackson, something cannot be the result of nothing. We therefore turn to the positive symptoms implying the coordinated activity of the whole and expressing the tendency of an injured organism to survive and to throw into action a new order of functions best fitted for survival under the new condition. There is implied in this conception of positive symptoms their integrated as well as their purposeful nature. In fact, the positive symptoms themselves emerge as the manifestations of recovery, and the latter reflects the activity of the organism as a new whole under the condition of a natural emergency or disease. Compared with the original and uninjured organism, the new whole may be anatomically reduced, but considered as a functioning whole, it is on equal rank with the healthy organism. Once the injured organism has reached the new state of survival and recovery,

this state may prove its beneficial effects, regardless of its genesis. In the light of this conclusion, recovery emerges as a non-specific natural phenomenon, in this respect similar to the symptoms and lesions with which diseases may or may not be found to be associated and which are rarely specific, if at all. The conclusion is suggested that it is this non-specific nature of recovery which makes it fit for serving its purpose under changing conditions. I submit that the organism recovering from one disease may even be better equipped to resist a second disease than the healthy organism which has not yet thrown into action all the functions enabling it to endure and to survive under the most varied conditions. The conception of recovery would thus merge into that of prevention. There is no contradiction inherent in this merger, as long as we remain aware of the basic truth that both are different expressions of the activity of the same organism, which remains the identical source of life and action in recovery and prevention.

Recovery is here conceived as synonymous with successful reaction to disease; for our purpose we had to limit the conception of disease to its purely negative aspect. In still more general terms, recovery emerges as a chapter of the natural history of disease, though indeed only its closing one. Should one object to this analysis and maintain a concept of recovery as a self-sufficient state, sharply isolated from disease, the continuity of both conditions would be lost and there would no longer be that chronological and unbroken sequence of two states through which the same organism passes when regaining health after falling sick. Should, however, the thesis be adopted that recovery is indeed synonymous with the organism's reaction to disease and therefore implied in the latter, the following criteria of recovery can be distinguished.

1. Recovery does not succeed disease; the first signs of its onset are simultaneous with the first signs of invasion of the organism, destruction, and disturbed function.
2. Recovery is as active a process as any other manifestation of a living organism.
3. Since recovery tends toward elimination of disturbing factors and regaining of health, thus implying a directed or purposeful behavior, it must be conceived as a total or integrated behavior.
4. It is through this total character that all states of recovery gain a basic identity.
5. It is through this identity that they lose their specific nature.

6. It is for this reason that one can speak of recovery, in most general terms, with the same justification as one speaks of disease though there are many diseases and many recoveries.

Is Medicine a Science?

I tried to uncover the philosophical presuppositions of contemporary medicine as they are implied in the physician's major actions which have been the same at all times, namely interrogation, diagnosis, prognosis, and therapy. Though at all times the physician has consecrated his life to the fight against forces threatening human existence, he has always been attracted by the enormous problem raised by death. One of the great medical classics of the early nineteenth century deals with the problem, which has been investigated from all sides, physiological as well as philosophical, by countless generations of physicians. It remains remarkable and, I submit, significant of our time and our anxieties that contemporary medicine has nothing to offer in this field. It seems that death has ceased to be a subject of major interest to the contemporary physician, with the exception, however, of one school of thought in contemporary psychiatry, which makes the strong demand on us to admit a death instinct among the driving forces in modern man. Nor has contemporary medicine reached a firm and unmistakable stand in the age-old problem of euthanasia. While mercy death is outlawed by the medical profession, many a physician's thought continues painfully to strive for an independent solution. What finally remains to be investigated is the structure of contemporary medicine as a whole. Each generation raises the question of the qualification of medicine as a science. At the turn of our century, medicine still labored under the heritage of the once powerful and popular positivistic philosophy. But is it not significant that two of the most eminent experimental scientists of the nineteenth century confessed their antagonism to positivism? They did it independently of each other and each in his own terms.

It seemed logical that Pasteur's candid and artless nature expected from religion that satisfaction which positivism was unable to offer, and which the scientist could not renounce: "Positivism," he said, "does not take into account the most important of positive notions, that of the Infinite. . . ." The same road was not open to Claude Bernard, his great contemporary and, at least at times, his friend. Claude Bernard, though much more sophisticated and sceptical than Pasteur, never gave up his firm belief in the blessings of science, which he wanted to rest on founda-

tions of its own. Instead of deserting science and escaping into the mystery of the universe as soon as science seemed to desert man, Claude Bernard seached for new criteria of science. These are to be found in his posthumous writings. He identified science with determinism, i. e. the constant relation between a given phenomenon and its causes. But the physician, he said, can establish no constant relation between a given remedy and the cure of the disease; he can only establish probabilities which, he opined, are not compatible with science. Claude Bernard finally reached the conclusion that there is no such thing in life as constancy of effects, and this conclusion marks the second and final stage of the philosophy of the experimental method. An inanimate body, he asserted, has neither spontaneity nor individuality; therefore, effects are constant and predictable. But the individuality of a living organism entails an inconceivable complexity of conditions under which we are compelled to work and which arise from the external and internal milieu, the species, the specific individuality of the person submitted to experimentation, the hereditary influences, age, size, sex, nutritional state, and moral factors. "The final aim of experimental medicine," he concluded in his posthumous "Principles of Experimental Medicine," "is to reduce all individual variations to a general law to which each particular case refers." Claude Bernard firmly believed that this magnificent formula conveyed new and true criteria of science. But his conclusion has not found its way as yet into contemporary medicine, though it offers to medical thought the unique key to the solution of one of the most disturbing dialectics which has arisen in our time in all quarters of medical art, namely the dialectic between the individual and the general, or between the patient as the sole target of treatment and his disease as a product of man's abstracting power. This product has no perceptible reality; Philippe Pinel called it an idea. This idea must be conceived as embodied in the countless manifestations and modifications of diseased individuals. Though it is true that the physician has only to deal with individuals, he still approaches them with the full equipment of man's generalizing thought. We conclude that the dialectic between patient and disease is unavoidable because it is implied in the structure of human intelligence.

MEDICO-HISTORICAL NEWS AND ACTIVITIES

CORRESPONDENCE AND REPORTS

SOME FAMOUS DOCTORS I HAVE KNOWN *

FREDERICK R. TAYLOR

The following paper was presented on June 2, 1955, at a special session of the Frederick R. Taylor History of Medicine Society of the Bowman Gray School of Medicine of Wake Forest College, Winston-Salem, N. C. The Society, which is now a constituent society of the American Association of the History of Medicine, was named in honor of the author who died on November 1, 1955.

I have been privileged to know a good many great doctors, many of whom have taught me formally, and all of whom have taught me many things. I can select only a few to discuss here. Certain personal impressions of famous doctors should be worth more at this time than material assembled from ancient and more modern literature in the field of medical history, for such impressions are at least original with me. So, we embark on a little lake of thumbnail sketches of just a few of the famous doctors I have known. I graduated in medicine in 1913 at the University of Pennsylvania, thus my remarks on my teachers there belong to that period.

To me, *Dr. David Riesman*, Professor of Clinical Medicine in the University of Pennsylvania, was at once the most perfect master of the art, the science, and the history of medicine I have ever known. We had a special course in medical history, but Dr. Riesman incorporated medical history in a much more vital way in his clinic at old Blockley, as the Philadelphia General Hospital was then called. I revere him as the greatest practicing physician and teacher of medicine I ever knew. He had the simplicity of the profound thinker who transmits his thoughts into practical deeds. When demonstrating a patient, he would often keep us in suspense until he had discussed the earliest known knowledge of the condition, and then, having led us step by step to the most modern understanding of it, would finally reveal his diagnosis. This made us interested in medical history by giving us perspective.

Dr. Riesman made no attempt at oratory, but his speech was so clear and impressive, and conveyed such profound thought, that it made us realize that we sat at the feet of one of the world's greatest masters of medicine.

A few of Dr. Riesman's clinics stand out especially clearly in my memory. One was on the famous "yellow man," as we dubbed him. Dr. Alfred Stengel, Professor of Medicine, had already shown him to us without a diagnosis, as had *Dr. M. Howard Fussell*, Professor of Applied Therapeutics, a "one man clinic," who carried 5 bags in his car, including a portable microscope, urinalysis set, slides and stains for blood, sputum, etc., and culture media, and made prompt bedside

* From the Department of Internal Medicine of the Bowman Gray School of Medicine.

diagnoses in the home in many cases for which other doctors would require more time and the service of technicians. He was Osler's family doctor in Osler's Philadelphia period, and, in my estimation, Dr. Fussell ran a close second to Dr. Riesman as a physician and a teacher of medicine.

Physical examination revealed little about the "yellow man" other than fever and intense jaundice. He died before a report on the blood culture revealed a fulminant pneumococcemia. At autopsy the lungs showed some involvement, but the pneumococcemia had killed the patient before the pneumonia became evident clinically. Dr. Riesman asked me to present to the class a discussion of jaundice in pneumonia, illustrating it with histologic slides of tissues of the "yellow man" which I obtained from the Department of Pathology. I got up early and carried more than 30 microscopes, on the installment plan, down four flights of stairs and over to the amphitheater in the Philadelphia General Hospital. This involved a lot of leg work. They were set up, properly illuminated, and focused on slides of various tissues, all in a big semicircle. Then I presented the subject to the class, Dr. Riesman listening attentively. Everyone was then asked to view the slides, which had been labelled by a technician in the Department of Pathology. Dr. Riesman led off, using one of his favorite comments, "Exquisite!" Naturally, I felt very much set up until he came to a slide labelled "pancreas." He looked at it longer than at the others, then came over to me, put his hand on my shoulder in a gesture of affection, and said, with his slight German accent, "That is not pancreas." I almost wished the floor would open and swallow me. Dr. Riesman had such a love for us, and we for him, that his mildest reproof was worse than a diatribe from others. I had accepted the label uncritically. The tissue was from a salivary gland.

Another case was that of an elderly woman with multiple diseases including a crippling arthritis of long duration. Finally, Dr. Riesman asked, "Can none of you see anything else of interest in her condition?" None could. Dr. Riesman went on, "That is too bad. You must learn to use your eyes. It is exquisite. She has webbed toes."

The most famous case of all, however, was presented in his barmecide clinic. Those familiar with the Arabian Nights will recall the famous barmecide ball, a great banquet given by a potentate to his friends. An elaborate "dinner" of many courses was given, save for the fact that no food was served. The servants went through the motions of serving imaginary viands from silver dishes, the host meanwhile describing their rarity and excellence, and his guests, falling in with his whim, applauding. After some hours of this, a banquet of real food was served, and a good time was had by all.

Dr. Riesman's barmecide clinic came about as follows: He had hoped to demonstrate to us a case of tetanus, but the patient was still in convulsions and far too sick to be brought to the amphitheater. Explaining this, Dr. Riesman said he would give the clinic anyway, as if the patient were present, but we would have to see him with our minds' eyes. Then he began:

"Our friend, George Washington, colored, as you see, lies on the examining table, resting on the top of his head and the soles of his feet, with his back arched in a bow, in the tetanic convulsive position known as *opisthotonos*. His mouth,

which he cannot open, is drawn into the horrid grin that we call *risus sardonicus*." Then he gave the history of injury and told of the development of our knowledge of tetanus and its treatment. The disease, known to the ancients, was described by John of Arderne, who lived from 1307 to 1380, and who is usually considered the first English surgeon of prominence. The description appeared in a posthumous publication, *De Arte Physicale et de Cirurgia of Master John Arderne, Surgeon of Newark*, dated 1412, and translated in 1922 by Sir D'Arcy Power.[1] Dr. Riesman gave such a graphic description of the patient that we really could see him with our minds' eyes, and it is no exaggeration to say that when he finished, the class broke into thunderous applause.

All this, however, utterly fails to given an adequate picture of Dr. Riesman. He was of medium height, wore rimless spectacles, had iron-gray hair, and a neatly trimmed mustache; his Teutonic thoroughness, his strict scientific conscience, and his love for patient and pupil were but a part of him. I always thought of him as Dr. Riesman *plus*. That *plus* was the shadowy form of the Great Physician, whom I always seemed to sense as standing behind him with His hands on Dr. Riesman's shoulders, blessing him.

Dr. John B. Deaver, Professor of the Practice of Surgery, was the great showman of the University of Pennsylvania medical faculty of those days. He disliked vacant front seats and false modesty, and would exclaim, "Come on down out of the diarrhea row, you boys—I don't like to see you *all* sick at the same time." He made us learn stock answers to stock questions. Some of these were:

Q. What's the old colored man say?
A. Seein's believin'.

Q. What is it we must learn to do in surgery?
A. Read the sign-boards at the cross-roads.

Q. What's the rule of three in surgery?
A. Cut well, sew well, get well.

Q. Who walks by faith?
A. The general practitioner.

Q. Who walks by sight?
A. The surgeon.

Q. What is mightier than the pen and the sword put together?
A. The aseptic scalpel in the hand of the master surgeon.

We all had to learn his famous surgical nursery rhyme:

Perforation means purgation
In an appendix kinked and bad.
Food and drink, they worry him.
And aperients drive him mad.

The first lecture in the United States on the use of mineral oil as an intestinal lubricant was given in Dr. Deaver's clinic by *Mr. Arbuthnot Lane* of London,

[1] The translation may be found in Logan Clendening's *Source Book of Medical History* (New York: Paul B. Hoeber, Inc., 1942), p. 86.

inventor of the Lane bone plates. Lane had become almost a faddist on colectomy for nearly everything from bad temper to cancer of the breast! He talked to us about that, and then about liquid petrolatum, or mineral oil, internally, as a substitute. A big, imposing man, physically, with enormous vitality, about as forceful a speaker as Dr. Deaver himself, he simply radiated enthusiasm. When he finished, my classmate, Bill Sawyer, who later became Medical Director of the Eastman Kodak Company, asked the dose of liquid petrolatum. Mr. Lane replied, "Oh, did you ever oil a machine?" "Yes, Sir," said Bill. "Well, don't you know that you can use as much as you please, but that if you put in too much it will dr-r-rip?"

Then Dr. Deaver offered to do a colectomy on Mr. Lane before the class, if he agreed, but Mr. Lane replied, "No thank you. I wear a spring attachment." This seems to be English for a truss!

In his lectures, *Dr. Edward Martin*, John Rhea Barton Professor of Surgery, put things in an unforgettable way. Here are some examples:

"The nasal bone is a fragile bone, the nasal bone is an accessible bone, and, when indignant at a man, the nasal bone is a tempting bone, therefore, fractures of it are frequent."

To treat fractured ribs, "Strap the chest on the side of fracture tightly with adhesive plaster, in full expiration, and, if the patient be a man and his chest be hairy, and you do not have a *special* grudge against him, shave him before you strap him."

In those days, young girls with fractured clavicles were kept in bed with a shot bag over the fracture to prevent a cosmetic deformity. Dr. Martin said, "So, treat the homely hirsute laborer differently from the young girl who is presently to be stripped half-naked and placed upon the marriage market."

The Martin treatment for cantankerous patients was famous: "Refer the patient to your dearest enemy down the street."

Dr. John G. Clark was Professor of Gynecology. A big stout man of commanding figure, he was perhaps the handsomest man on the University of Pennsylvania Medical Faculty of that day, and was, in addition, immensely popular. He had a whimsical way of nicknaming his boys, when he called them down into the pit, for famous gynecologists, such as "Brother McDowell," "Brother Sims," "Brother Emmett," or "Brother Hegar." One day he asked one of my classmates to name the symptoms of a far-advanced ovarian cyst. "Well," began the boy, "You have an enlarged abdomen. . . ." at this point Dr. Clark interrupted with a twinkle in his eyes, "Yes, brother, I know I have, but please don't get personal!"

Dr. Barton Cooke Hirst, Professor of Obstetrics, was perhaps the most peculiar member of the medical faculty of those days. Author of Hirst's *Text-Book of Obstetrics*, which ran through many editions, he was short, fat, had a bald steeple head that ran up to almost a point in the back, affected incredibly loud vests, and spoke in a curious falsetto voice with some extradinary pronunciations. Showing us a cranioclast, he remarked that it looked like a ve-tér-i-nary instrument. We often referred to him as the 10 biggest liars in the state of Pennsylvania, meaning it as a compliment, for he seemed to tell the tallest tales we ever heard. If you want an interesting half-hour, get an old copy of his *Text-Book of Obstetrics* and

skim through the footnotes, which contain several such tales. When he told a big one, the boys would stamp, whistle, or even catcall, but he and we loved it, and he was always ready to accommodate with a still bigger tale. Once, however, we got a bit too noisy, and he had to call us to account, which he could always do. He told us how differently a professor was treated in a German medical school, for there he was almost a demigod, and when he entered the classroom, all present would rise and bow. The next clinic of Dr. Hirst's was filled with the class when he entered, and we all rose and salaamed! The best show of his life was, however, unintentional. He was operating with his back to us when the drawstring of his trousers broke and let them fall. We could see through the gap in his gown in the back that he wore a pair of sky blue long drawers, and we made the welkin ring. "B. C.," as we called him, merely turned around and remarked casually, "This, Gentlemen, is a complication of major operative obstetrics that I don't think you will find discussed in any text book in the world," and resumed operating, quite unperturbed. Though he was head of the department, we always said that "B. C." put the trics in obstetrics, while "Brother Jack" (Dr. John C. Hirst) taught the course through his extramural quiz.

I have mentioned *Dr. Alfred Stengel*, Professor of Medicine. He was our great master of satire. His big show was his medical clinic before the combined third and fourth year classes in the University of Pennsylvania Hospital. Dr. Stengel would come in with a retinue of associates, assistants, house officers, a nurse and a patient, and often one or more "visiting firemen" from far-flung places in this country, Canada, or abroad. One spring afternoon he called down into the pit a member of our class who was so conceited that we all knew that something would happen when he and Dr. Stengel finally came to grips. Our classmate, whom I will call X, strode down the ramp with every sail set and every flag flying. Dr. Stengel had a man stripped to the waist. Handing X a skin pencil, he asked him to percuss the man's chest and abdomen, and outline the areas of dullness he might find, including heart and liver dullness, etc. Obviously strutting his stuff, X outlined normal areas of heart and liver dullness. Then Dr. Stengel seemed to get almost obsequious, rubbed his hands together, and said, "Mr. X, would you think it presumptuous of me to make one little suggestion?" "No indeed, Dr. Stengel, go as far as you like," came the amazingly bumptious reply. The rest of us knew that Dr. Stengel's mock humility meant that the lightning was about to strike, and strike it did. "Mr. X, if I may presume to say so, I think you overlooked one tiny detail in your work, and that is, just what day this is. Today, Mr. X, is the first day of April, *commonly known as All Fools' Day, Mr. X, and the man before you has a complete transposition of viscera, and the areas of dullness are the precise opposite of what you have drawn*!" I think this made a man of X, for I have heard nothing but good of him since. It was the best April Fool joke I ever witnessed.

For over 30 years, *Dr. Henry A. Christian*, Hersey Professor of the Theory and Practice of Physic in Harvard University, was a great influence in my life, and still is, for that matter, though he died in 1951. During three decades, at his request, I sent him critical notes on the entire loose-leaf *Oxford Medicine* and, beginning in 1929, contributed a number of chapters myself. It was my privilege

to spend some time with him in Boston in 1922 and again in 1939. He was the first Physician-in-Chief at the Peter Bent Brigham Hospital, Dr. Harvey Cushing being the first Surgeon-in-Chief, and together they made it what it has been so aptly nicknamed, "the West Point of Medicine." A native of Lynchburg, Va., a notable athlete in his younger days, he exuded health and vitality until his unexpected fatal coronary occlusion while on a summer vacation in New Hampshire. I have five loose-leaf notebooks filled with letters from him, from 1921 to 1951, inclusive. One of my major regrets is that the condition of my own heart made me unable to accept a telegraphic invitation to be an honorary pall-bearer at his funeral.

The last famous doctor I will mention is *Dr. Joseph Hill White*. He was born a few years before the Civil War in Milledgeville, Georgia, and in his early boyhood had every advantage that a distinguished and well-to-do family could give him. However, the White home lay right in the path of Sherman's march to the sea, and the family lost everything its members had, save their great intelligence, courage, and character. Going to work at the age of twelve in such occupations as messenger, bookkeeper, telegraph operator, young White was finally able to study medicine in the University of Maryland, from which he graduated with high honors, and at once entered the old United States Marine Hospital Service, later to become the United States Public Health Service. Dr. White and his wife, who was Miss Emily Humber, were, between them, related to five presidents of the United States—the two Adamses, Andrew Jackson, and the two Roosevelts, as well as to Lieutenant-General D. H. Hill, C. S. A., and also to Dr. Christian, the Emersons, Lowells, and others of Boston. Early in his career, Dr. White made the acquaintance of Dr. Carlos Finlay of Havana and, before the Walter Reed Board had done its definitive work on yellow fever, accepted Dr. Finlay's theory of the transmission of yellow fever by a particular species of mosquito, then called *Stegomyia fasciata*, but later renamed *Aedes aegypti*. A little epidemic of yellow fever broke out in the Old Soldiers' Home in Hampton, Virginia, in 1899, and Dr. White was ordered there. The night before he left Washington, Dr. Walter Reed visited him at his home, and he told Dr. Reed he would stop the epidemic by mosquito control. He did, for the first time in history. I have personally seen the engraved testimonial gold watch presented to him for that work, which he wore whenever he visited his daughter in High Point. Later, after the Reed Board's work, Dr. White wiped out an epidemic of yellow fever from New Orleans before frost for the first time in the history of that city. While on duty at a quarantine station at Blackbeard's Island, near Savannah, he found yellow fever aboard an African mahogany ship that had not called at any point since leaving Africa, and Dr. White informed the medical world that yellow fever existed in Africa. It may not be too much to say that Dr. White saved more lives than anyone else of his day, for he literally wiped out yellow fever from Central America and from very large areas of the northern part of South America. His work there was halted, however, by serious hemorrhages from peptic ulcers, so he had to return to Washington. Fortunately, he had trained others to carry on his work.

Dr. White was very fond of Guatemala, before it had Communist trouble, and in his old age he and two unmarried daughters spent a winter in Guatemala City.

The private railroad car of the President of Guatemala was put at Dr. White's disposal, and the President conferred on him the Grand Order of the Quetzal, Guatemala's highest decoration. It was the first time it had ever been given to a foreigner. When the President was a young man he had worked under Dr. White in eradicating yellow fever from his country, and he wanted to express his own and his country's appreciation of Dr. White's great service.

General Gorgas was Dr. White's close friend. Dr. White was the first medical man to affirm the existence of jungle yellow fever, a fact abundantly established now. He believed the tales of natives coming out of the Amazonian jungles about cases of the disease there.

Dr. White died in Washington on February 28, 1953, at the ripe age of 93. On some of his visits to High Point he was ill, and I was honored in being his physician. As a young man he discovered a cure for migraine which he does *not* recommend. He suffered severely from migraine until one day he was struck by lightning in the living room of his house. The bolt hit him at about the waistline, burned a spiral streak down one leg, shattered that heel, and its violence threw him across the room, fracturing his skull against a wall. His doctor told him he would not survive the injury, but Dr. White said he was wrong and proved it by recovering. I used to visit him at every opportunity when he was in High Point, for his son-in-law, Dr. R. A. Herring, then our city health officer, is a friend of mine. To sit at Dr. White's feet and hear him reminisce was a thrilling experience. He was the only patient I ever had who had personally contracted three great tropical scourges—yellow fever, cholera, and plague.

A White Memorial window is in the Southern Presbyterian Church of the Pilgrims in Washington, where both Dr. and Mrs. White were long-time members. Mrs. White had died, but Dr. White was still living when it was dedicated. At that time, Dr. Andrew Reed Bird, after paying high tribute to Mrs. White, said:

"Dr. White lived a life of extraordinary usefulness. A volume would be required to recount the vital service which God has rendered through him to individuals and to great masses of the population of North and South America. It would be fascinating reading to scan the history of individuals, both white and black, whom he has rescued from distress and enabled to become, in their turn, constructive citizens on several continents. His work in fighting the ravages of yellow fever with Walter Reed and other scientists, has saved the lives of literally innumerable families throughout the world, and will do the same for generations yet unborn."[2]

[2] An illustrated and more detailed account of Dr. White's life and work can be found under the title "Men of Medicine" in *Postgraduate Medicine*, 1951, IX, 271.

ANNOUNCEMENTS

AMERICAN ASSOCIATION OF THE HISTORY OF MEDICINE

The Twenty-Ninth Annual Meeting of the Association was held at Durham, N. C., April 19-21. The following actions taken are here brought to the attention of the members in advance of the publication of the full report of the meeting in a later issue.

Elections: Benjamin Spector, President; Owsei Temkin, Vice President; Additional members of the Executive Committee: Erwin H. Ackerknecht, George Rosen, David A. Tucker, Jr., Leo M. Zimmerman. Editorial Committee: Lloyd G. Stevenson, Chairman, Madeline E. Stanton, Herbert S. Klickstein. Nominating Committee: Jean Curan, Chairman, George J. D'Angelo, Genevieve Miller.

Medals: The WILLIAM H. WELCH MEDAL was awarded to Lyman H. Butterfield "for his monumental edition of the letters of Benjamin Rush."

The WILLIAM OSLER MEDAL was awarded to Edward D. Coppola, Yale University, for his essay, "The Discovery of the Pulmonary Circulation: a New Approach." Honorable mention went to Kenneth E. Stanley, Jr., University of Kansas, and Donald Newman, University of California at Los Angeles, for their essays, "The Sedimentation Rate" and "Vaccination before the Court."

Amendment to the By-Laws: The following article was added to the By-Laws: "*Article 15.* Members whose dues for any calendar year remain unpaid by July 1 of that year shall no longer receive the publications of the Association."

Annual Meeting, 1957: The Thirtieth Annual Meeting will be held at Richmond, Va., May 6-8, 1957, in connection with the 350th anniversary of the founding of Jamestown.

NATIONAL NEWS

Armed Forces Medical Library

In its *News* of February 1956, the Armed Forces Medical Library announces the celebration of the 125th anniversary of its founding to be held in 1961. "For that occasion Dr. Dorothy M. Schullian of the Library's History of Medicine Division is engaged in writing a history of the Library and its services to medicine since its inception in 1836. The History will be fully documented by archival material in the Library and elsewhere. Fortunately, however, the Library is still sufficiently young that records locked in memory alone will benefit the History. It is earnestly requested, therefore, that anyone in possession of material which might be helpful, whether in the form of written records or of personal reminiscences, communicate directly with Dr. Schullian at the History of Medicine Division, Armed Forces Medical Library, 11,000 Euclid Avenue at Adelbert Road, Cleveland 6, Ohio."

Chicago

Dr. C. I. Reed will deliver the annual D. J. Davis Memorial Lecture on Medical History at 1 p. m., May 9, in room 221 of the Medical-Dental-Pharmacy Building, University of Illinois College of Medicine. Dr. Reed's topic will be: "John Morgan, Father of the First American Medical School."

Northwestern University Medical School is sponsoring a series of ten lectures on the Growth of Medicine to be held on consecutive Wednesdays, March 28, to June 6, 1956 (except May 30), 5-6 p. m. at Thorne Hall. The following lectures will be presented: "The Great Plague" (Barry J. Anson), "Nicholas Senn and His Influence on Surgery in Chicago (Manuel E. Lichtenstein), "J. B. Murphy" (Loyal Davis), "Conquest of Contagious Diseases" (Archibald L. Hoyne), "The Development of Medical Education in the United States" (Richard H. Young), "Body Snatching" (Leslie B. Arey), "Who First Isolated Insulin" (Carlos I. Reed), "John Jacob Abel" (E. M. K. Geiling), "Frank Billings" (Joseph A. Capps), "Birth and Growth of the American Medical Association" (Morris Fishbein).

Los Angeles

The College of Medical Evangelists has announced a lecture by William Frederick Norwood on "The Enigma of Doctor Benjamin Church; A High Level Scandal in the American Colonial Army Medical Services," for January 30, 1956. The lecture is the eighth given in the Commemorative Series during the present fiftieth year since the founding of the College.

New York

The Trustees of Columbia University have decided that the Dental School Museum be named The Charles H. Land Museum as a memorial to Dr. Charles H. Land, pioneer in the use of porcelain in dentistry.

Deaths

George Sarton, March 3, 1956; Joseph H. Pratt, March 22, 1956. The *Bulletin* will publish obituaries of Dr. Pratt, who was a member of the American Association of the History of Medicine, and of Dr. Sarton, one of its honorary members.

PROGRAMS OF MEETINGS

Benjamin Waterhouse Medical History Society, Boston

April 2, 1956: William Malamud, "History of Psychiatry" (Discussion Ives Hendrick).

May 7, 1956: Thomas C. Smith, "Some Aspects of Endocrinology." Election of Officers.

Society of Medical History of Chicago

March 8, 1956: Barry J. Anston, "Monsters and Monstrosities in the Collected Works of Ambroise Paré"; Michael L. Mason, "Paracelsian Surgery."

NEWS FROM ABROAD

International Congress of the History of Medicine, 1956

The Fifteenth International Congress of the History of Medicine will be held in Madrid and Salamanca, September 21-28, 1956, under the presidency of Professor Pedro Lain Entralgo. The address of the Secretariat of the Congress is: Professor Luis S. Granjel, Instituto Arnaldo de Vilanova de Historia de la Medicina, Duque de Medinaceli 4, Madrid. The following subjects will be discussed: (1) The Iberian Peninsula and the Arabic World, (2) The Medical Relations between the Iberian World and the Other Parts of Europe and America, (3) Medical Iconography in the 16th century. Members wishing to present communications at the Congress should send to the Secretariat the title as well as an abstract of the communication. The provisional program as well as the conditions of attendence will be sent immediately.

India: Creation of the First Chair and Department for the History of Medicine

The Andhra Government has recently sanctioned the appointment of a Professor of History of Medicine and the organization of a Department of History of Medicine in the Andhra Medical College, Vizagapatnam. The appointment has been offered to and accepted by Professor D. V. Subba Reddy, Head of the Department of Physiology, Madras Medical College, Madras, and founder and Secretary of the Indian Association of History of Medicine, who has been a pioneer in India in the promotion and popularization of studies and lectures in the history of medicine, and is well known in international circles and institutions devoted to the study of the history of medicine.

Deaths

Dr. Frans Jonckheere died in Brussels on March 10, 1956, at the age of 52. Dr. Jonckheere was particularly well known for his many studies in ancient Egyptian medicine.

Professor Bernhard Milt, Director of the Medico-Historical Institute of the University of Zürich, died on March 18, 1956, in his 60th year.

BOOK REVIEWS

KENNETH WALKER. *The Story of Medicine.* New York: Oxford University Press, 1955. 343 pp. Ill. $6.00.

As indicated by the word "story," this book addresses itself to a lay audience. An outline of the development of medicine introduces the reader to its aims and achievements. A subsequent presentation of specific problems of medical practice and research offers the opportunity of tracing their historical past. The first part of the book (chs. I-IX) leads from prehistoric medicine into the nineteenth century, while in the second part (chs. X-XX) the historical discussion centers around such topics as communicable and deficiency diseases, surgical antisepsis, mental disease, and quackery.

The current interest in things medical is bound to stimulate the appearance of new popularizations of medical history, and Dr. Walker's style is not ill-adopted to this task. While it is hardly to be demanded that a popular book of this kind present hitherto unknown material, any historical work should be expected to discuss its subject with reasonable accuracy. It is on this count that the book proves unsatisfactory.

There seems at present to exist an inclination to view factual mistakes in historical works written by physicians as a matter of small concern. This tendency is deplorable, especially where popular books are concerned, since the layman is more at the mercy of the author than the expert is. It is to be admitted that in any history of so large a subject as medicine the occurrence of mistakes is all but unavoidable; but it would be an error to excuse them on other grounds than human imperfection. To give an example of the consequences of even understandable mistakes: Possibly misled by the name, the author refers to E. Du Bois-Reymond as "the great French physiologist" (p. 166). At first sight one may think that it matters little to an understanding of medical history if this Prussian of Franco-Polish-Swiss descent is classified as a Frenchman. But there is another side to it. Du Bois-Reymond, together with his friends Helmholtz, Brücke, and Carl Ludwig, was one of the most outspoken leaders of the mechanistic trend that emerged in German biology during the ten years preceding the revolution of 1848. A French Du Bois-Reymond would change the whole physiognomy of French and German physiology at the middle of the last century. Unfortunately, the number of similar mistakes is very great in the present book. Moreover, there occur many statements for which the very presuppositions seem lacking or doubtful, or where the sequence of events is reversed.[1]

[1] For instance: We read (p. 66) that "Greek surgery was inferior to Greek medicine" and that "the Romans were far more interested in surgery than in medicine." Fracastoro is emphatically placed among medical laymen (see pp. 16, 65, and 234). We hear (p. 120) that neither Paré nor Paracelsus "could have accomplished his task at an earlier period of history without incurring serious risk of imprisonment by the Church," a statement that seems related to the claim (probably based on the laws against surgical practice of clerics) that (p. 195) "in the Middle Ages the Church maintained a hostile attitude

A pleasing exterior, together with a number of well reproduced illustrations, will undoubtedly attract readers. But in view of the works already available, the present book can hardly be justified on the ground of a pressing need. In fairness to the author it has also to be mentioned that he makes a few good points (for instance: p. 49, the contrast between the representation of muscles in ancient art and their relative neglect in early Greek medical literature; p. 262, the rejection of the legend of the Countess of Chinchon; p. 304, the equivocal attitude of Liebig). But in the absence of any truly new interpretation of medical history, these points are insufficient to balance the credit side against the shortcomings of this book.

OWSEI TEMKIN

E. P. GOLDSCHMIDT. *The First Cambridge Press in Its European Setting.* (The Sandars Lectures in Bibliography, 1953). Cambridge: at the University Press, 1955. x + 100 pp. Ill. $3.75.

This slim little volume is the last work of a man who deserved well of bibliophiles and of historians in many fields. By profession a bookseller, by choice a scholar whose several publications have enriched our knowledge of humanism and of early printing and binding, he was already ill when he was elected Sandars Reader in Bibliography for 1953, and he was unable to deliver the lectures in person. He passed the proofs of them a few days before his death on 18 February 1954. They issue capably edited, without undue alteration, by Mr. J. L. Vellekoop and printed with the beauty and care which we expect from the Cambridge University Press.

In the three lectures Mr. Goldschmidt has investigated that peculiar anomaly of the printer who foolhardily sets up his press in a small university town far from mass methods of distribution, who for a time is enabled by patronage to issue scholarly and unpopular books, and who with the patronage for one reason or another withdrawn must necessarily, and scarcely to his surprise, yield to economic stringencies and depart. Such was the career in Cambridge of John Siberch, from the vicinity of Bonn, who beginning in 1521 and patronized by Richard Croke and Henry Bullock printed ten books of varying importance. They were the first to be printed in Cambridge and they have long been thoroughly studied by bibliographers and students of the art of printing. Mr. Goldschmidt sets them in their background of humanism, discussing the place of Greek in

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to the study of human anatomy and did everything within its power to discourage the carrying out of surgical operations." In other places, things are put upside down: In reaction to the Iatro-physicists, "Baglivi (sic) and Van Helmont . . . formed the new Iatro-chemical school of physiology" (p. 303). American readers will be puzzled about the relationship (p. 247) of "a certain Mr. Cotton Mather" to "Dr. Zabdiel Boylston of Boston, another medical man who had been brave enough to give him professional support," and "some of the American clergy" who, fortunately, "had the courage to defend the new idea" (i. e. of variolation). The paper of Josiah Clark Nott of Alabama is dated "1748, a century and a half before Manson talked to Ross about his malarial mosquito theory."

humane letters at that time and relating Siberch's Cambridge output to that of Continental scholar-printers. In three appendixes he lists the books from Bullock's library which were taken over after his death by Queens' College; provides dates of Latin translations and first Greek printings of Greek authors; and furnishes eleven facsimiles of pages by Siberch and other scholar-printers. Two plates, documentary notes, and a helpful index complete the volume. The second appendix is part of an increasing and widespread interest in translations of classical authors; this interest has found expression also in the list of English, German, French, and Spanish translations from Greek and Latin given by R. R. Bolgar in *The Classical Heritage and its Beneficiaries* (Cambridge University Press, 1954) and in the collaborative project "Mediaeval and Renaissance Latin Translations from Ancient Greek" currently sponsored by an editorial board whose secretary is Professor Paul O. Kristeller of Columbia University.

For medical historians the high point of this book is found on pp. 12-14. One, and by far the most important, of Siberch's ten Cambridge publications was Thomas Linacre's translation of Galen's *De temperamentis et de inaequali intemperie libri tres* (STC 11536). Issued in 1521, it is an outstanding example of the importance in this period of Latin translations from the Greek; the Greek text appeared only in 1525 in the monumental edition of Galen by the successors of Aldo Manuzio. It reveals likewise how close was the bond with the birthplace of humanism, for Linacre, founder and first president of the Royal College of Physicians in 1518, dedicated the edition to Pope Leo X, with whom he had sat in 1486 in Florence to the lessons of Poliziano. Few libraries can boast this edition today except in microfilm or in the facsimile reprint, with an introduction by Joseph Frank Payne, which was printed in a small edition in 1881 by C. J. Clay, Printer to the University of Cambridge. The most substantial of Siberch's publications, it illustrates not only early Cambridge printing but also that humanism in science which is so greatly to be coveted four centuries later.

DOROTHY M. SCHULLIAN

J. B. DE C. M. SAUNDERS and CHARLES D. O'MALLEY. *The Illustrations from the Works of Andreas Vesalius of Brussels.* With Annotations and Translations, a Discussion of the Plates and Their Background, Authorship and Influence, and a Biographical Sketch of Vesalius. Cleveland and New York: The World Publishing Company, 1950. 252 pp. Ill. $10.00.

Dr. Saunders, an anatomist, and Dr. O'Malley, an historian, have collaborated on several other studies of Renaissance anatomy: *Andreas Vesalius Bruxellensis: The Bloodletting Letter of 1539* (1947) and *Leonardo da Vinci on the Human Body* (1952), the latter having the same form and style as the book being reviewed.

The stated purpose of the present work is: ". . . to make available to the general reader, the student of art, of science and of medicine, the illustrations from the works of Andreas Vesalius through the medium of which they may gain some insight into this achievement of science and art (p. 9)." The book is an historical atlas, nine by twelve inches, containing all the illustrations from Vesalius' *Tabulae*

Anatomicae Sex (1538), *Venesection Letter of 1539*, *De Humani Corporis Fabrica* (1543) and the *Epitome* (1543). In a 32 page introduction the authors present a biographical sketch of Andreas Vesalius (1514-1564) and some background information on the development of anatomical illustration during the Renaissance. A bibliography is not provided. The problem of identifying the source of the illustrations used by Vesalius is carefully reviewed. The authors conclude that the majority of these drawings were created in the studio of Titian by several artists under his supervision. A few drawings have been definitely traced to Vesalius himself and three are known to be the work of a Flemish artist, Jan Stephan van Kalkar (1499-1546?). The identity of the principal artist, however, is still a subject of controversy.

The body of the book contains 96 full-page plates, each one accompanied by a translation of the original Latin text and annotated by the authors. The woodcut portrait of Vesalius and a series of four plates showing the evolution of the title page of the first edition of the *Fabrica* are included. All the illustrations have been reproduced from the famed *Andreae Vesalii Bruxellensis Icones Anatomicae* published jointly in 1934 by the New York Academy of Medicine and the Library of the University of Munich. They resemble closely in quality the prints in the *Icones* many of which were taken directly from the original woodblocks. Most of the plates have been only slightly reduced in size except for those of the skeletons in the *Tabulae Anatomicae Sex* which are the largest of the woodcuts. These have been reduced from 17½ to 10 inches with a resulting loss of detail in the shadowed areas. No mention is made of the illuminated initial letters of the *Fabrica*. Considering their small size, their absence in the *Icones* and the special insight they provide on Vesalius' anatomical techniques, they would have added a distinctive feature to this beautiful collection of illustrations.

The authors present some sound advice for those who would study the works of Vesalius. They point out that examination of his illustrations without careful study of the text is misleading because Vesalius incorporated many observations on comparative anatomy in his drawings of the human figure (p. 100). All graduate students in anatomy should be referred to this book. It provides a glimpse of the actual beginnings of modern anatomical science. Through such a work as this—which does not belabor its points or confuse them by pursuing details—many of our future anatomists would discover that the history of science is science itself.

BENJAMIN C. MOFFETT

JOHN D. DAVIES. *Phrenology, Fad and Science. A 19th Century American Crusade*. New Haven: Yale University Press, 1955. xvi + 203 pp. Ill. $3.75.

Phrenology is now forgotten but in its time, that is, a little over a hundred years ago, it was just as scientific and, as the author of this study remarks, probably better known than Darwinism and Freudianism later. It owed its popularity to the fact that a scientific hypothesis, posing as a doctrine, was coupled with a reform movement. In this book the author traces the career of this reform movement in the United States.

Imported by Spurzheim and Combe in the 1830's, phrenology became first, as in Europe, popular among the élite. Leading medical men (like Charles Caldwell, John G. Warren, Elisha Bartlett, N. S. Davis, Amariah Brigham, Isaac Ray, S. Morton), scientists (Benjamin Silliman), educators (above all Horace Mann), and writers (Edgar Allan Poe, Walt Whitman) embraced it. In the hands of the indefatigable quacks Orson and Lorenzo Fowler, their families and their agents, phrenology soon became a mass movement, a cult, which lasted for one generation. After a sketch of the total movement, the author studies in special chapters the impact of phrenology on education, penology, medicine (especially psychiatry and health fads), and literature. According to the author the success of phrenology is partly explained by its harmony with the leitmotifs of the period: the moral law, the free individual, the mission of America. It was a utilitarian and optimistic faith. It was one of the factors which brought science to the American mind and provided a rational explanation of human life.

This is a well written, well documented, and intelligent book. My disagreements with it are of a minor nature. The author seems to be not too well informed concerning the actual role of Flourens and Broca in the phrenology discussion. He definitely underestimates Gall's own tendencies as a social reformer. He therefore often attributes ideas which can be found in Gall himself, to his popularizers. It is true that nowhere did phrenology become a mass movement in the hands of charlatans to the same extent as in the United States; but the author underestimates the European "contribution" in this direction. As so often, a common trend in western civilisation was only carried to its extremes in its most uninhibited and tradition free sector. My sympathies for the utilitarian and optimistic Fowlers and their cohorts are considerably more limited than those of the author. Quacks are always utilitarian and optimistic.—All this does not detract from the value of this excellent study of a significant phenomenon.

ERWIN H. ACKERKNECHT

G. H. BROWN. *Lives of the Fellows of the Royal College of Physicians of London, 1826-1925.* (Munk's *Roll*, Volume 4.)* London: Royal College of Physicians, 1955. x + 637 pp. £2.2.0.

William Munk, Harveian Librarian of the Royal College of Physicians from 1857 to his death in 1898, issued his first *Roll* in 1861, in two volumes. The biographical record covered the period from the foundation of the College in 1518 to 1800. A second edition, published in 1878 in three volumes, carried the record forward to 1825, the year the College moved to its present site in Pall Mall East. As practically every physician in Great Britain who achieved distinction became a member of the College, biographical notices in regard to them become of particular importance. A fourth volume has now been added to this famous series covering the century from 1826 to 1925, and includes naturally some of the best known names in British medicine. Expertly compiled from the *Lancet*, *British Medical Journal*, and other sources by Mr. G. H. Brown, this volume adds a faultless record of men whose names have become almost household words in modern medicine. The editor, more-

* Vols. 1-3, 2nd ed., 1878, still available. Complete set (with vol. 4) £4.

over, in presenting the facts regarding each individual has also briefly but very carefully evaluated the man's position in medicine. There has been no hesitation about reporting deficiencies as well as extolling the better qualities in an individual's career. The analysis is often shrewd, penetrating, but eminently fair, and frequently amusing.

For instance, Herbert Hawkins, a dean of St. Thomas' Medical School in 1896, was one of the leading teachers of the day. "An expert in blackboard demonstration, he gave his explanations in simple and methodical terms, aided by a suave, bantering, good-humoured manner. He was an elegant figure, fashionably dressed, tall, slim and handsome. His one weakness was lack of perseverance" (p. 371). Sir Donald Macalister's faults are listed as "a lack of flexibility and sympathy in judging men and affairs" (p. 316). On Sir Humphry Rolleston, Brown writes: "a rigid self-discipline, associated with perhaps an excessive concern with small details, did not detract from his natural courtesy nor from his sense of humour, and was probably a main factor in his unostentatious, useful life" (p. 375). Of his predecessor, Brown notes with fairness that: "Munk's *Roll*, which was not originally intended for publication, lacks the detailed references to original sources and the methodical presentation of a modern historical work. Nevertheless it serves an essential purpose in providing historians and biographers with an invaluable and copious fund of information" (p. 76).

Thus the dry bones of biography are made alive and men live again in these pages, so skillfully enriched by the efforts of a modest "compiler." The Royal College of Physicians of London deserves the warmest congratulations from the medical public, librarians, and historians for providing them with a book of outstanding usefulness.

HENRY R. VIETS

PAUL SCHILDER. *Psychoanalysis, Man, and Society*. Arranged by Lauretta Bender. New York: W. W. Norton & Company, 1951. x + 382 pp. $4.00.

Before his untimely death Schilder had planned to write a treatise on psychology, consisting of 6 volumes, dealing with (1) body image, (2) perception and thought, (3) goals and desires, (4) psychotherapy, (5) art, and (6) sociology. Only the first, "The Image and Appearance of the Human Body," and the fourth, "Psychotherapy," were published during the author's lifetime. His wife, Dr. Lauretta Bender, signs as editor of this volume, which reveals all of Schilder's rich talents, but also some of his shortcomings. His ideas and thoughts appear here as if in *statu nascendi*, not in a finished form. This may be partly due to the fact that the book consists of a collection of 19 papers individually written between 1932 and 1940 and first brought into a systematic order by the editor. The papers deal with such topics as psychoanalysis and philosophy, the relation between social and personal disorganization, the analysis of ideologies as a psychotherapeutic method, success and failure, alcoholism, aggressiveness, crime and the criminal, cultural patterns and constructive psychology. To these are added "Remarks on the Psychology of War" prepared for the 1941 meeting of the American Orthopsychiatric Association. In a short introduction Schilder says that "psychiatry does not see the individual as an isolated unit, but as a part of the community . . . the cure of

the individual is accordingly a social process of fundamental importance . . . every individual psychotherapy has to be evaluated from the point of view of the deeper well-being of the personality as well as society." The first chapter—in the opinion of this reviewer the most interesting one—deals with the relation of psychoanalysis and philosophy. Here Schilder, though a faithful psychoanalyst, takes the liberty, four years before Freud's death, to stress respectfully but decidedly, his deviation from some of the basic views of the Master. He takes exception to Freud's teaching about regression and the death instinct: "I do not believe in the regressive character of instincts and I do not believe that the goal of human strivings is rest." Presenting a profession of faith rather than the reasons for his convictions, the author affirms his belief "in the causality of psychic process, but at the same time also in free will." Yet in the following chapters, where Schilder, concerned with particular topics, frequently illustrates his ideas through short case histories, one can not always clearly see how his findings are related to his basic assumptions. Many of these papers leave the impression of improvisations, of carefree sketches rather than of completed drawings. It is frequently difficult to discover the lines separating facts from interpretations, observations from phantasies, authentic histories from phony reports given by patients under criminal indictment. One may doubt whether the re-publication of these papers, which, tied together, resemble a swollen river, running fast and carrying a great amount of driftwood, has done a real service to the author. Yet one fact stands out and remains noteworthy: Schilder's pioneer work in group therapy.

ERWIN W. STRAUS

RENÉ BIOT. *Vocation de la Médecine Française*. Collection le Sel de la Terre. Éditions d'Histoire et d'Art, Librairie Plon: Paris, 1955. 218 pp. French francs, 480.00.

The author of this book is the spiritual head of a group of physicians, biologists, philosophers, teachers, and theologians, whose tendencies are laid down in the annual publications of the "Groupe Lyonnais d'études médicales, philosophiques et biologiques." This reviewer, himself a member of the group, and once in close personal contact with it, feels safe in stating that these tendencies are directed towards a purification of medical art and assistance from all purely mechanical and inhumane principles and practices. The noblest traditions of the medical profession, particularly its strictly individualizing approach towards disease and cure, are called forth to save and to revive these traditions, however, with an undeniable and undenied religious undercurrent pervading the majority of the members, though not necessarily in a dogmatic fashion. The movement has been gaining momentum in France.

There is to be found in this book a brilliantly written account of the lives and achievements of Ambroise Paré, Laënnec, Claude Bernard, Pasteur, Laveran, Richet, d'Hérelle, Carrel, Pinel, Charcot, Villermé, Gosselet, Barthez and Morat.

In the second part of the book, the present state of the medical profession and of medical assistance in France is outlined, shortcomings analyzed, future developments forecasted and suggestions made as to the renaissance of certain fundamentals of medical theory and practice, all too frequently and almost inevitably denied by

the over-industrialization of therapeutics, the pressure exerted by social conditions and emergencies, wars, and an ever more powerful collective organization of medical assistance. It is in this part of the book that the specific character of French medicine merges into the universal structure and deficiencies of contemporary medicine at large.

The book is a most successful attempt to outline the major contributions made by French physicians to the advancement of medical knowledge and assistance. The reader may be tempted to test the legitimacy of the title by giving to the term "vocation" the deeper meaning of a specific fitness of the structure and tradition of French culture for medical thought and medical action at large; in other words, the reader may wish to discover the marks of French genius and to identify its vestiges throughout that chapter of medical history which has been written by the French. Though realizing the somewhat precarious nature of the problem raised and the almost insurmountable difficulties standing in the way of a satisfactory solution, this reviewer was still able to identify in this book the two major though opposite positions which French thought assumed in the past, and which remained significant constituents of the intellectual and spiritual physiognomy of France. Each of these positions is embodied in the name of an outstanding figure. Montaigne reflects the *realistic* element, so characteristic of the renaissance; the lasting influence of his writings and philosophy seems to have sponsored the efforts made on French soil to attack the realities of disease, to uncover their true and perceptible sources, in brief, to be unromantic, factual, and experimental. The well-known *sceptical* element of Montaigne's thought is not lacking in this current, were it only for Claude Bernard's *doute expérimental*, one of the pillars on which the experimental method rests. Pascal reflects, though in a less explicit way, the other constituent of French thought which pervaded the life, devotion, and self-sacrifice of many a French genius whose research and medical assistance in war and peace were as much as a perpetual religious service. Many a career evoked in this book testifies to the truth of this assertion.

W. Riese

Douglas Guthrie. *From Witchcraft to Antisepsis: A Study in Antithesis.* Logan Clendening Lectures on the History and Philosophy of Medicine, Fifth Series. Lawrence, Kansas: University of Kansas Press, 1955. 53 pp. $1.50.

Dr. Guthrie, lecturer on the History of Medicine at the University of Edinburgh, gave this interesting study in contrasts as the fifth series of the Logan Clendening Lectures on the History and Philosophy of Medicine at the University of Kansas. The first, dealing with witchcraft in relation to medicine, was an example of continuing social psychiatry, magical and detrimental to humanity. The second, dealing with the great achievement of Joseph Lister (1827-1912), describes the logical, scientific, and beneficial results of a systematic achievement in the spirit of modern good health.

There are many interesting ideas sharply condensed in this small volume. The psychological factors involved in witchcraft are well analyzed. On the other hand, there is a worthy appreciation of the sound work of a solid man.

Chauncey D. Leake

THE BULLETIN RECENTLY RECEIVED *

Bibliotheca Walleriana. The Books Illustrating the History of Medicine and Science Collected by Dr. Erik Waller and Bequeathed to the Library of the Royal University of Uppsala. A Catalogue Compiled by Hans Sallander. 2 vols. Stockholm: Almqvist & Wilksell, 1955. xii + 471, 494 pp. Ill. 175 Swedish Kronor.

Walther Forster. *Beethovens Krankheiten und ihre Beurteilung.* Wiesbaden: Breitkopf & Härtel, 1955. 68 pp.

W. W. Francis. Tributes from His Friends on the Occasion of the Thirty-Fifth Anniversary of the Osler Society of McGill University. Montreal: Published by the Society, 1956. xv + 123 pp. Ill.

Richard B. Goldschmidt. *Portraits from Memory.* Recollections of a Zoologist. Seattle: University of Washington Press, 1956. ix + 181 pp. $3.50.

Robert J. Hunter. *The Origin of the Philadelphia General Hospital, Blockley Division.* Philadelphia: The Rittenhouse Press, 1955. 40 pp. Ill.

Ira A. Kipnis. *A Venture Forward.* A History of the American College of Administrators, 1955. 145 pp. Ill. $5.00.

Medical Library Association. *Handbook of Medical Library Practice.* Second edition, edited by Janet Doe and Mary Louise Marshall. Chicago: American Library Association, 1956. xv + 601 pp. $10.00.

Opuscula Selecta Neerlandicorum de Arte Medica, XVIII: Volcher Coiter. Amstelodami: Nederlandsch Tijdschift voor Geneeskunde, 1955. lxxix + 263 pp. Ill. [In Latin and English].

Francis M. Rackemann. *The Inquisitive Physician.* The Life and Times of George Richards Minot, B. S., M. D., D. Sc. Cambridge, Mass.: Harvard University Press, 1956. xi + 288 pp. Ill. $5.00.

Wilson G. Smillie. *Public Health: Its Promise for the Future.* A Chronicle of the Development of Public Health in the United States, 1607-1914. New York: The Macmillan Company, 1955. x + 501 pp. Ill. $7.00.

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* The *Bulletin* reserves freedom of decision as to the publications to be listed in this section.

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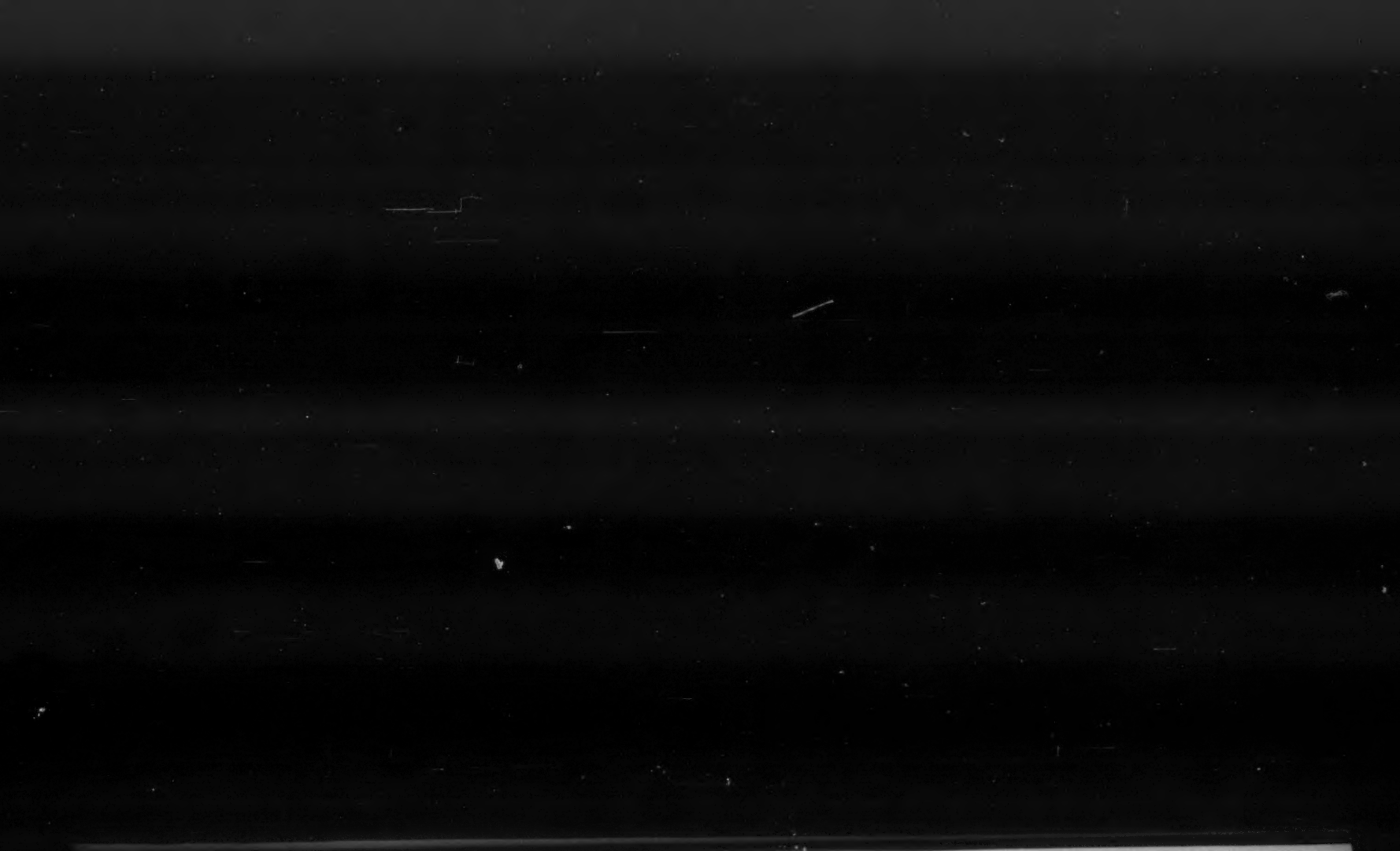
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